

AMC TODAY

SUSTAINING THE STRENGTH OF THE NATION

U.S. ARMY MATERIEL COMMAND MAGAZINE

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IN THIS ISSUE:

LIFE CYCLE MANAGEMENT | **STRENGTHENING SUSTAINMENT ACROSS FOUR PORTFOLIOS**





VANTAGE POINT

GENERAL DENNIS L. VIA
AMC COMMANDING GENERAL

Life Cycle Management Commands (LCMCs) provide the foundation for sustainable readiness across our Army formations.

LCMCs as we know them today were launched by the Army's Life Cycle Management Initiative when the Assistant Secretary of the Army (Acquisition, Logistics and Technology) and the U.S. Army Materiel Command (AMC) commanding general signed a Memorandum of Agreement on Aug. 2, 2004. The intent was to strategically and operationally align structure, processes and responsibilities to enable greater synergy, and improve the effectiveness and efficiency of all organizations involved in sustainment and the life cycle of weapons programs and equipment.

The initiative created the four LCMCs: U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM); U.S. Army Communications-Electronics Life Cycle Management Command (CECOM); Joint Munitions and Lethality Life Cycle Management Command/Joint Munitions Command (JMC); and U.S. Army Tank-automotive and Armaments Life Cycle Management Command (TACOM).

Today's LCMCs integrate life cycle management across the materiel enterprise. These commands operate the Army's Organic Industrial Base, which maintains, modernizes and resets everything from vehicles and helicopters to communications equipment. LCMCs also provide essential training to Soldiers and units, and deliver support at the "point-of-need" through Logistics Assistance Representatives. LCMCs ensure units always have the highest quality and modernized equipment they need, when and where they need it.

This edition of *AMC Today* highlights the ongoing efforts of the LCMCs to provide readiness

across our Army. Inside, you will find stories about AMCOM's initiatives to ensure aviation and missile brigade commanders and warrant officers know and understand the command's capabilities for support; CECOM's support to units during Combat Training Center and National Training Center rotations; JMC's immense ammunition manufacturing, delivery and storage mission and how they sustain ammo across its life cycle; and the work done at TACOM's Organic Industrial Base facilities, from storage, repair and reset, to manufacturing.

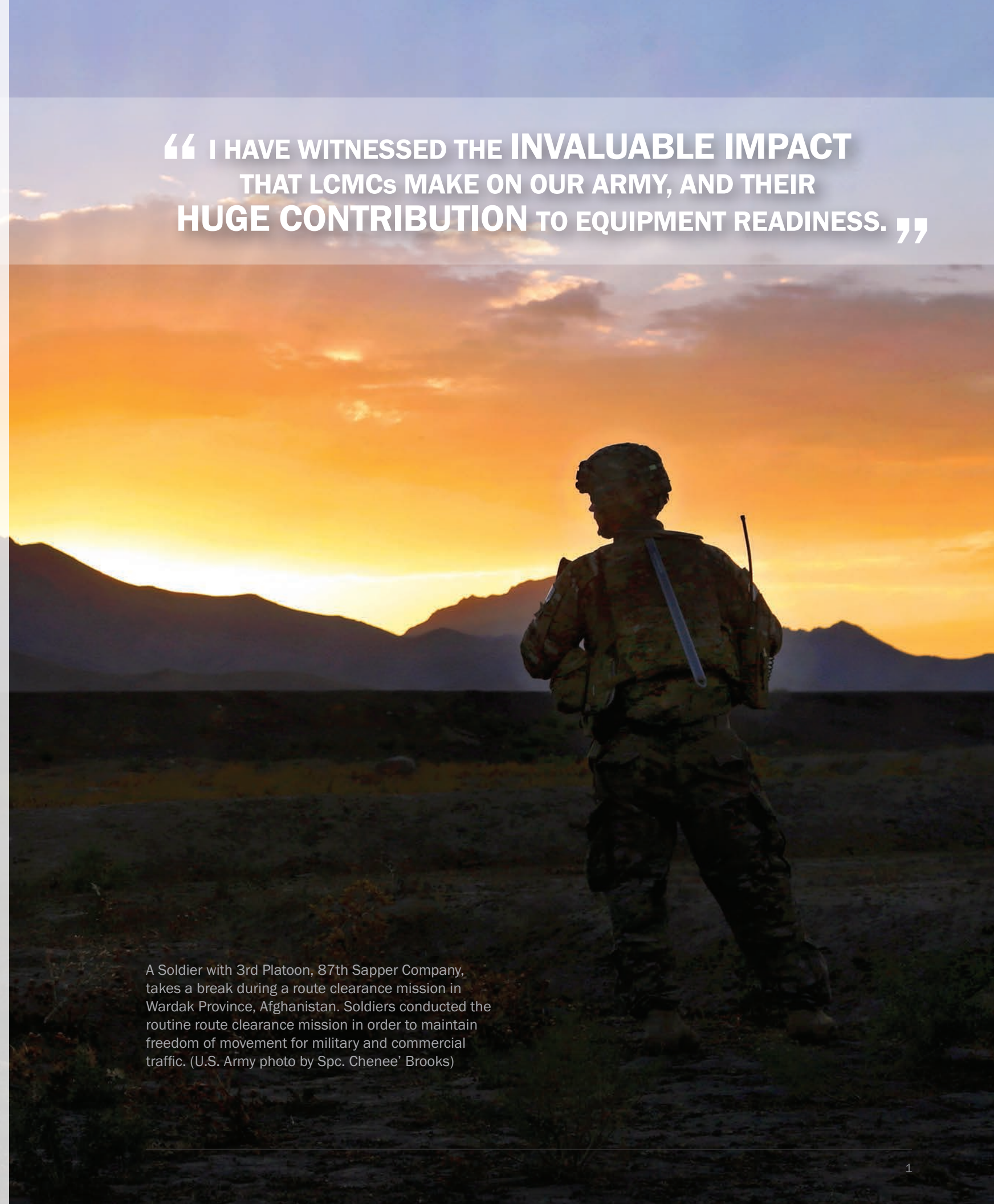
As the AMC commander, and having served previously as an LCMC commander, I have witnessed the invaluable impact that LCMCs make on our Army, and their huge contribution to equipment readiness. Through two of the longest wars in our nation's history in the last decade, LCMCs ensured our warfighters remained the best-equipped fighting force.

As we prepare for the future, amidst decreasing budgets and increasing global uncertainty and complexity, we must optimize life cycle sustainment around a portfolio-based approach. LCMC commanders must be empowered to establish and manage priorities and resources within their respective portfolios, creating a single point for cradle-to-grave sustainment, from research and development, acquisition, fielding, upgrades and maintenance, to final disposition.

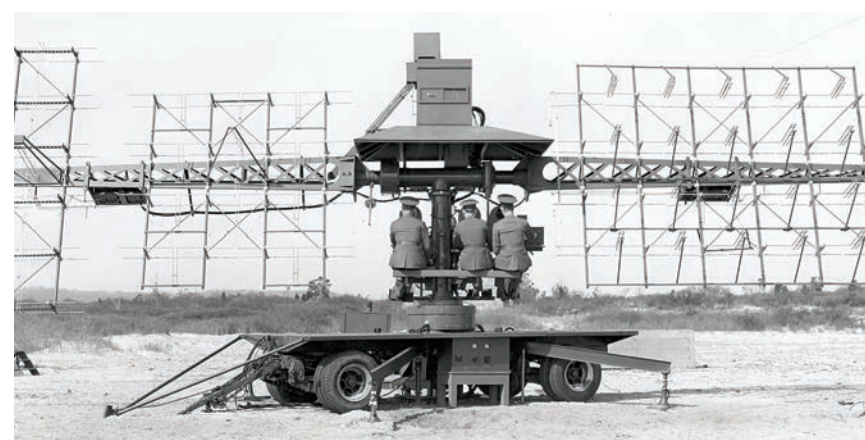
By strengthening our logistics and sustainment efforts around the four primary portfolios, we allow Soldiers to effectively "Move-Shoot-Communicate," achieving their most basic tasks effectively and efficiently. With LCMCs as our foundation, AMC will continue to deliver readiness across our Army and the joint force.

AMC – Sustaining the Strength of the Nation!

“ I HAVE WITNESSED THE INVALUABLE IMPACT THAT LCMCs MAKE ON OUR ARMY, AND THEIR HUGE CONTRIBUTION TO EQUIPMENT READINESS. ”



A Soldier with 3rd Platoon, 87th Sapper Company, takes a break during a route clearance mission in Wardak Province, Afghanistan. Soldiers conducted the routine route clearance mission in order to maintain freedom of movement for military and commercial traffic. (U.S. Army photo by Spc. Chenee' Brooks)



CONTENTS

CURRENT INITIATIVES

- 14 AVIATION & MISSILE**
AMCOM 101 enhances field knowledge
- 17 GROUND COMBAT SYSTEMS**
Organic Industrial Base facilities crucial to Army readiness
- 26 COMMUNICATIONS & ELECTRONICS**
Home Station Training brings together readiness enablers
- 29 MUNITIONS**
Integrated logistics strategy enhances munitions business model

MISSION SUPPORT

- 36 SECURITY ASSISTANCE**
Foreign Military Sales process touches every phase of life cycle management
- 38 DEPLOYMENT & DISTRIBUTION**
Moving military equipment to the point of need
- 40 CONTRACTING**
Incorporating contracting early in equipment life cycle
- 44 RESEARCH & DEVELOPMENT**
Integrating Science and Technology into portfolios
- 46 SUSTAINMENT**
Brigade Logistics Support Teams participate in Pacific Pathways

FOCUS AREA

- 6 IMPLEMENTING LIFE CYCLE MANAGEMENT**
Life cycle sustainment aligned across four portfolios



FRONT COVER: The U.S. Army Materiel Command is making a concerted effort across the organization to strengthen life cycle management and sustainment across four key portfolios: Ground Combat Systems; Aviation and Missile; Communications and Electronics; and Munitions. (U.S. Army photos)

COLUMNS

- 1 VANTAGE POINT**
Gen. Dennis L. Via, AMC's commanding general, talks life cycle management commands and their role in sustainable readiness
- 4 PERSPECTIVES**
Chief Warrant Officer 5 Darren L. Cook, AMC command chief warrant officer, discusses the future of portfolio-based sustainment

FEATURES

- 5 AMC BY THE NUMBERS**
Fascinating facts about AMC and its mission around the globe
- 12 AMC NEWS & NOTES**
Notable happenings throughout the command
- 20 ARSENAL OF THE BRAVE**
Meet AMC Soldiers and civilians dedicated to mission success
- 32 ACROSS THE YEARS**
How AMC's portfolios have met the needs of Soldiers over the decades
- 42 BATTLETECH**
Sophisticated technology used across AMC
- 48 INDUSTRY OUTREACH**
Briefings provide clear view to business partners

AMC TODAY MAGAZINE

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PERSPECTIVES

Featuring this issue's guest columnist
CHIEF WARRANT OFFICER 5 DARREN L. COOK
AMC COMMAND CHIEF WARRANT OFFICER

MAINTAINING STRATEGIC PORTFOLIO-BASED SUSTAINMENT IN A TIME OF TRANSITION

The Army's ability to employ lethal and nonlethal overmatch against an enemy and conduct sustained operations to prevent, shape and win conflicts requires the best-equipped and maintained force possible. Our Army is engaged in multiple complex operations around the globe. Maintaining a sustainable equipment readiness rate to support the Army's demands is a huge undertaking.

confident warfighters. They are also developers of specialized teams of Soldiers.

Similarly, LARs, by definition, are subject matter experts from each of the commodity commands within AMC. LARs represent the full range of AMC's capabilities across the four primary portfolios. LARs serve in over 27 specialties, provide assistance to commanders and leaders in analyzing readiness, identifying problems, determining responsibility for resolution, and when appropriate, assist with that resolution.

Together, warrant officers and LARs provide the necessary life cycle management of Army equipment from cradle-to-grave – from acquisition, fielding, upgrades and maintenance to final disposition. The warrant officer is the Army's tactical/operational life cycle manager, while the LAR provides an assisting role from tactical through the Organic Industrial Base.

They also offer a wealth of capability to units, commanders and Soldiers in training, advising, assisting, management, maintenance and resolution of sustainable readiness issues.

Consequently, the importance of warrant officers and LARs, if employed correctly, becomes more prevalent as these technical experts fuel the process to fix equipment and logistical shortfalls, to ensure units stay ready to train and fight.

Today, AMC employs more than 1,100 LARs who work with Army units across the country and around the world, adding their expertise and experience to achieve logistics solutions. LARs are normally embedded within AMC field units called Army Field Support Battalions, Brigade Logistics Support Teams and Logistics Support Teams.

Army warrant officers and LARS serve shoulder-to-shoulder with Soldiers, sharing their technical expertise to keep equipment operating and supplies flowing. They are the lifeline to life cycle management and the foundation of sustainable readiness.

“THE ARMY MUST
RETHINK HOW IT MAINTAINS
ITS EQUIPMENT TO ACHIEVE
SUSTAINABLE READINESS.”

The U.S. Army Materiel Command (AMC) is the nation's premier provider of materiel logistics support to the warfighter. Over the last decade, the Army has relied heavily on defense Contractor Logistics Support to maintain its equipment. As funds decrease and our Army transforms into an expeditionary, regionally aligned force, past practices like heavy reliance on defense contractor logisticians to maintain complex weapons systems and equipment will diminish. The Army must rethink how it maintains its equipment to achieve sustainable readiness.

Two enablers that are key to addressing this issue are warrant officers and Logistics Assistance Representatives (LARs).

Warrant officers are self-aware and adaptive technical experts, combat leaders, trainers and advisors. They administer, manage, maintain, operate and integrate Army systems and equipment across the full spectrum of Army operations. Warrant officers serve in over 26 specialties, are innovative integrators of emerging technologies, dynamic teachers and

AMC BY THE NUMBERS

AVIATION & MISSILE

29,000+
SPARE AVIATION AND MISSILE PARTS
MANAGED BY AVIATION AND MISSILE COMMAND

250
LOGISTICS ASSISTANCE REPRESENTATIVES
STATIONED THROUGHOUT THE WORLD

50
YEARS OF THE PATRIOT MISSILE
SYSTEM – MAKING IT THE OLDEST
PROJECT OFFICE IN THE ARMY

GROUND COMBAT SYSTEMS

3,200
PRODUCT LINES MANAGED
BY TANK-AUTOMOTIVE
AND ARMAMENTS
COMMAND (TACOM)

38,000
GROUND COMBAT
SYSTEMS COMPONENTS
MANAGED BY TACOM

65%
OF ALL EQUIPMENT SUPPLIED
TO MAJOR ARMY FORMATIONS
PROVIDED BY TACOM

COMMUNICATIONS & ELECTRONICS

3,400
COMMUNICATION-
ELECTRONICS COMMAND
(CECOM) DEPLOYMENTS
OVER THE LAST FIVE YEARS

59
CECOM LOCATIONS
IN 23 STATES

2,755
SOFTWARE REQUIREMENTS
FILLED BY CECOM'S
SOFTWARE ENGINEERING
CENTER IN FISCAL YEAR 2014

445
LOCATIONS FOR AMMUNITION
SHIPMENTS IN 48 CONTIGUOUS STATES

18,000
CONTAINERS MOVED WORLDWIDE
PER YEAR FOR TRAINING AND
CONTINGENCY OPERATIONS

118,000
ANNUAL AMMUNITION INSPECTIONS

AMMUNITION

LIFE CYCLE MANAGEMENT COMMANDS: THE FOUNDATION FOR SUSTAINABLE READINESS

By Elizabeth Behring, AMC Public Affairs

AMC'S LCMCs ARE ORGANIZED INTO FOUR PORTFOLIOS:

- GROUND COMBAT SYSTEMS
- AVIATION AND MISSILE
- COMMUNICATIONS AND ELECTRONICS
- MUNITIONS

The U.S. Army Materiel Command (AMC) and the Assistant Secretary of the Army (Acquisition, Logistics and Technology) collectively launched the Army's Life Cycle Management Initiative in 2004, setting into motion a collaborative process to better support missions and Soldiers worldwide.

The initiative established four life cycle management commands (LCMCs), which ensure Army readiness from research and development, through fielding and life cycle sustainment, until final disposition.

"LCMCs synchronize acquisition, technology, logistics and system life cycle sustainment, providing a more effective and responsive logistics system," said Gen. Dennis L. Via, AMC commander. "This highly effective and responsive logistics effort gives us the decisive edge on the battlefield."

LCMCs' capabilities include manufacturing, maintenance and reset, supply chain management and more. The commands are fully integrated with teams that work directly with commanders in the field and their units to meet warfighter needs - from beans to bullets and everything in between, while significantly increasing their ability to accomplish the mission.

The cockpit of a Black Hawk is covered in protective plastic in preparation for painting at Corpus Christi Army Depot in Texas. (U.S. Army photo by Sgt. 1st Class Michael Zuk)



One of three Army depots managed by the U.S. Army Tank-automotive and Armaments Command, Anniston Army Depot in Alabama provides the Army a variety of unique capabilities, including small arms repairs and the ability to overhaul and repair wheeled and tracked vehicles. (U.S. Army photo)

U.S. Army Tank-automotive and Armaments Command (TACOM), located in Warren, Michigan, is the Army's largest weapon systems research, development and sustainment organization, responsible for more than 60 percent of all Army equipment. Its portfolio includes the Abrams Main Battle Tank, Bradley family of vehicles, Towed and Self-Propelled Howitzers, and Strykers.

TACOM manages three Army depots with the ability to design, fabricate and manufacture specialty parts, unique prototype weapon systems and vehicles, and conduct myriad maintenance and upgrade operations. Red River Army Depot (RRAD) in Texarkana, Texas, is DOD's only remanufacturer of road wheels and tracks for various vehicle systems. A Center for Industrial and Technical Excellence (CITE) for tactical wheeled vehicles, RRAD works on the Mine-Resistant Ambush-Protected vehicle, Humvee, Heavy Equipment Transporter and rough terrain forklifts. Anniston Army Depot (ANAD) in Alabama overhauls and repairs small arms, combat vehicles including the Abrams tank, Bradleys and Strykers, and other systems. ANAD's capabilities include custom machining, missile recycling, overhaul and repair of all wheeled and tracked vehicles,

artillery repair and overhaul, and bridging systems overhaul and repair. Sierra Army Depot in California provides long-term life cycle solutions for storage, care and sustainment. The depot repairs or resets all Army fuel and water systems, and supports on-demand rapid deployment from its airfield.

Meanwhile, TACOM's Joint Manufacturing and Technology Center (JMTC), situated at Rock Island Arsenal, Illinois, is home to DOD's only multi-purpose and vertically integrated metal manufacturer. Together, TACOM's depots and JMTC play a critical function in the sustainment of the Army's Ground Combat Systems.

TACOM also works hand-in-hand with the U.S. Army Tank Automotive Research, Development and Engineering Center to develop advanced ground vehicle technologies and power while providing systems engineering and leadership support to improve the Ground System Enterprise.

"TACOM is central to all the Army's Ground Combat Systems," Via said. "We could not accomplish our mission in the Army without our Ground Combat Systems, and TACOM ensures these systems are modernized and remain ready for any contingency."

LEFT: Red River Army Depot, Texas, team members Joe Curl and Darrell Colvins disassemble a freightliner vehicle. (U.S. Army photo by Sgt. 1st Class Michael Zuk)



RIGHT TOP: An Israeli Iron Dome Tamir missile was successfully fired from the U.S. Army's newest missile launch platform, the Indirect Fire Protection Capability Increment 2-Intercept Multi-Mission Launcher. The missile successfully engaged and destroyed an unmanned aerial vehicle target. (U.S. Army photo by John A. Hamilton)

U.S. Army Aviation and Missile Command (AMCOM), headquartered at Redstone Arsenal, Alabama, provides integrated engineering, logistics and contracting to more than 90 major U.S. Army systems. AMCOM is directly involved in every step of design, integration, fielding and sustainment of all aviation, missile and unmanned aerial systems assets.

AMCOM manages and operates two Army depots: Corpus Christi Army Depot (CCAD) in Texas and Letterkenny Army Depot (LEAD) in Pennsylvania. As the largest rotary wing repair facility in the world, CCAD overhauls the Army's helicopters, engines and components. Since 2003, it has completed maintenance on more than 500 aircraft, nearly 3,000 engines and more than 111,000 helicopter components. LEAD is known as the Army's Capabilities Based Depot and the premier DOD CITE for air defense tactical missile ground system support equipment, mobile electric power generation equipment, Patriot Missile recertification and route clearance vehicles.

AMCOM also has operational control of all aviation logistics management functions at Fort Rucker, Alabama, home of the Army Aviation Center. In this role, AMCOM oversees the maintenance and supply management of Fort Rucker's aviation fleet.

"AMCOM provides a unique capability to our Army," Via said. "Through programs like the Future Vertical Lift, which will produce the next generation of Army rotary-winged aircraft, to the Improved Turbine Engine Program, which will allow attack and utility helicopters to carry additional armament and troops more efficiently, at greater distances and with less fuel, the significance of AMCOM to Army aviation and missile readiness is truly extraordinary. It's going to be even more important over the long-term."



RIGHT BOTTOM: A Black Hawk without main rotor blades sits inside a flight test hangar at Corpus Christi Army Depot in Texas. After the aircraft is assembled, it will be flight tested and certified prior to customer delivery. (U.S. Army photo by Sgt. 1st Class Michael Zuk)



The General Eclectic T700 turbine engine is used in both the Apache and Black Hawk helicopters. (U.S. Army photo by Sgt. 1st Class Michael Zuk)

U.S. Army Communications-Electronics Command (CECOM), known as “the critical link” because of its mission to ensure global readiness of complex networked Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR), is located at Aberdeen Proving Ground, Maryland. CECOM provides 24/7 field support, foreign military assistance, information technology systems engineering/integration and more.

CECOM’s Tobyhanna Army Depot (TYAD) in Pennsylvania is a DOD CITE for C4ISR and Electronics, Avionics, and Missile Guidance and Control. TYAD performs full sustainment, from the design and repair to the overhaul of hundreds of electronic systems that include radio and radar systems, navigational computers and night-vision equipment.

“We call Tobyhanna one of our crown jewels,” Via said. “Established over 150 years ago, the Tobyhanna team works hard to build the kind of C4ISR sustainment capabilities we need now and for the joint force of the future.”



Soldiers from the 2nd Brigade Combat Team, 82nd Airborne Division, conduct communications checks en route to set up a tactical operations center at White Sands Missile Range in New Mexico during the Network Integrated Evaluation 16.1. (U.S. Army photo)



Pine Bluff Arsenal production workers Sam Whitfield, Andrew Scruggs, Glen Carter and Garry Watkins work on the M930 VL mortar body load line. (U.S. Army photo by Sgt. 1st Class Michael Zuk)

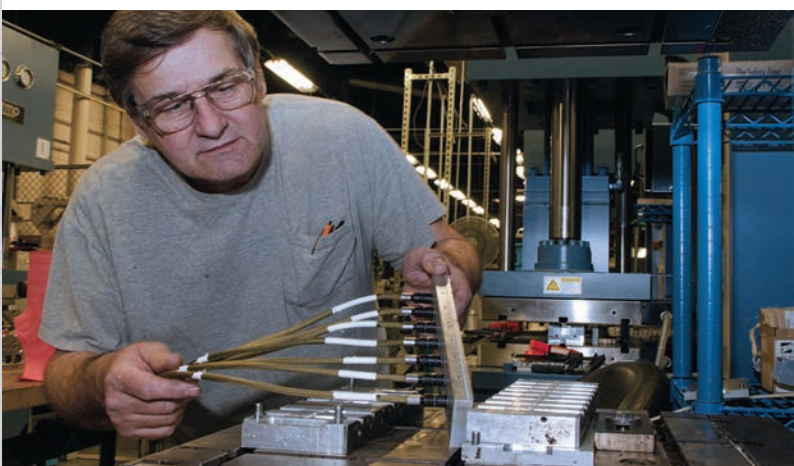
U.S. Army Joint Munitions Command (JMC),

located in Rock Island, Illinois, provides ammunition for all U.S. military services, foreign militaries as directed, and other government agencies. The command’s 17 production, storage, ammunition and chemical centers are spider-webbed across the country, from Scranton’s Army Ammunition Plant in Pennsylvania, to Tooele Army Depot in Utah.

“JMC is the global logistics integrator for life cycle management of DOD and Army munitions, from 5,000 pound bombs to nine millimeter ammunition,” Via said. “The work performed at these facilities is unique and critical to the nation’s defense. Our warfighters cannot fight without ammunition, and that’s what JMC provides globally – and does so in an outstanding way.”

JMC’s ammo plants produce more than 1.6 billion rounds, from bunker-buster bombs to rifle rounds, each year. This makes JMC accountable for around \$30 billion in munitions and missiles.

BELOW: Robert Wydro, rubber products fabricator and repairer, molds the ends on some of the cables fabricated in the Systems Integration and Support Directorate’s Machining Branch at Tobyhanna Army Depot, Pennsylvania. (U.S. Army photo by Steve Grzezdinski)



TOP: Newly refurbished “A” MK-1 40 mm canisters are packaged at McAlester Army Ammunition Plant, Oklahoma, where they will be put in storage until they are needed.



BOTTOM: Ora Cook, Brian Landers and Arthur Simmons, industrial workers for Pine Bluff Arsenal’s Directorate of Chemical and Biological Defense Operations, assemble M295 decontamination kits. These hand-held kits are used by Soldiers to decontaminate the individual’s personal equipment. (U.S. Army photos by Sgt. 1st Class Michael Zuk)

ENSURING READINESS IN THE FIELD

LCMCs employ Logistics Assistance Representatives (LARs) in each portfolio. These professionals are highly trained and experienced liaisons between AMC, LCMCs and the warfighter. LARs remain closely linked to commanders in the field to ensure they have the equipment they need, in good working condition, to conduct missions and other requirements. They work directly with Soldiers to provide technical assistance, troubleshooting, coaching and training.

“These elite experts are at the forefront of technical and sustainment support to warfighters worldwide,” said Via. “They are the link between the Soldier and maintainer on the ground and the vast resources of AMC’s LCMCs.”

Because LARs have involvement in every step of the process, from research and development to fielding and maintenance, they can deliver support to units in garrison and in the field, during any contingency, natural disaster or conflict. Due to their proximity, LARs can swiftly detect logistics-related problems that affect unit readiness, then reset or fix the equipment, and return it to the unit. They can also determine when an item needs an upgrade, and can often perform that task or teach the operators how to perform the upgrade or repair, negating the need to send it elsewhere.

BALANCING REQUIREMENTS AND RESOURCES

AMC announced a Mission Command alignment in February to strengthen and optimize life cycle sustainment around the four portfolios, in direct support of the Chief of Staff of the Army’s top priority of readiness.

Three Research, Development and Engineering Centers and three Contracting Centers were realigned Operational Control (OPCON) under their respective LCMCs. AMCOM gained OPCON over Aviation and Missile Research, Development and Engineering Center and the Redstone Contracting Center. CECOM gained OPCON over Communications-Electronics Research, Development and Engineering Center and Aberdeen Proving Ground Contracting Center. TACOM gained OPCON over Tank Automotive Research, Development and Engineering Center and Warren Contracting Center.

The alignment empowers LCMC commanders to establish and manage priorities and resources within their respective portfolios, ultimately providing more effective portfolio-based sustainable readiness, said Via.

“This shift is not new to AMC or our Army; we have centralized and decentralized these organizations and functions throughout the years as the operational mission environment and conditions have dictated,” he said. “Realigning now allows AMC to better balance mission requirements with shrinking resources, a smaller Army and continued worldwide deployments. It fosters prudent use of our limited resources, and provides flexibility to address the unknown future effects of sequestration.”

FOCUSED EFFORTS

Today’s LCMCs execute the full range of life cycle sustainment and logistics operations for every piece of equipment a Soldier drives, flies, communicates with, and shoots. Ultimately, they ensure equipment is where it needs to be, when it needs to be there, modernized, upgraded and in top working condition.

“From Ground Combat Systems, Aviation and Missile, Munitions, and Communications Electronics, focusing our sustainment efforts around four portfolios ensures our Soldiers remain the best-equipped force in the world,” Via said. “These commands – our LCMCs – provide the foundation for that readiness.”

AMC NEWS & NOTES

1 Former commanders inducted into AMC Hall of Fame

The U.S. Army Materiel Command (AMC) inducted six of its retired commanders into the AMC Hall of Fame during a ceremony at its Headquarters in March. The event, hosted by AMC Commander Gen. Dennis L. Via, honored past commanders, including: Gen. Ferdinand J. Chesarek, AMC's second commander; Gen. Henry A. Miley Jr., third commander; Gen. Richard H. Thompson, eighth commander; Gen. Louis C. Wagner Jr., ninth commander; Gen. William G.T. Tuttle Jr., 10th commander; and Gen. Leon E. Salomon, 12th commander. "Their exceptional leadership is why we're here today," said Via. "The work of these extraordinary commanders who made lifelong achievements is part of a foundation to ensure AMC stays ahead in the past, present and future. I am humbled and honored to induct this class into the 2016 Hall of Fame."



2 New Army award recognizes logistics leaders

Gen. Dennis L. Via, AMC commander, announced the establishment of the Lt. Gen. Arthur J. Gregg Sustainment Leadership Award at the Association of the United States Army Global Force Symposium and Exposition in Huntsville, Alabama, in March. Via presented the inaugural award to its namesake, retired Lt. Gen. Gregg, one of the Army's great logistics leaders of the 20th century, he noted. Gregg started as a private in 1946, and moved up the ranks to become a three-star general, retiring in 1981 as the Army's Deputy Chief of Staff for Logistics. "My philosophy on leadership is very simple and straightforward," Gregg said. "I think a leader must always put the mission first and himself or herself last." Future Lt. Gen. Arthur J. Gregg Sustainment Leadership Awards will recognize Soldiers or civilians whose leadership is credited with making significant and measureable contributions by improving operating efficiencies, readiness levels or demonstrating fiscal responsibility.

3 Letterkenny receives CITE designation

In March, Acting Secretary of the Army Patrick J. Murphy designated Letterkenny Munitions Center (LEMC) at the Letterkenny Army Depot in Chambersburg, Pennsylvania, as the Center of Industrial and Technical Excellence (CITE) for Army Tactical Missile Systems; Guided Multiple Launch Rocket Systems; and Low-Cost, Reduced-Range, Practice-Rocket Missile Maintenance. This designation identifies LEMC as the Army's premier center for missile maintenance. Through this designation, LEMC will now be able to enter into Public-Private Partnerships to perform additional missile maintenance work. "Receiving this CITE designation from Acting Secretary Murphy, a Pennsylvania native, is a major accomplishment for LEMC because it formally and publicly recognizes the expertise of our workforce and the quality of the work they do every day to support a vitally important element of combat power for the joint force," said Lt. Col. Trenton J. Conner, LEMC commander.



4 AMC reducing energy usage

AMC is reducing energy usage by more than six percent across nine installations. Energy Savings Performance Contracts (ESPC) allow AMC to partner with energy services companies to make improvements without upfront capital investments. Through an ESPC, McAlester Army Ammunition Plant in Oklahoma is replacing high-bay lighting with LED explosion-proof lighting. The change saves energy, increases safety and significantly decreases maintenance requirements. Other energy-reducing projects include new plating and paint systems at Joint Manufacturing Technology Center in Illinois and reductions in energy and water usage at Letterkenny Army Depot in Pennsylvania. "These partnerships enable us to remain focused on our mission while continuing to achieve great things for AMC and the Army," said Jennifer Morgan, facilities energy program manager at AMC.

5 Tobyhanna Antiterrorism Program among the best in the nation

Tobyhanna Army Depot's Antiterrorism (AT) Program was recently honored as one of the nation's best during the 14th annual Army Worldwide Antiterrorism Conference in Orlando, Florida. Depot Commander Col. Gregory Peterson accepted the award in February for Best Installation AT Program. "Tobyhanna Army Depot's Antiterrorism Program remains world-class and of strategic importance to the command, since depot personnel are routinely deployed to countries with a high terrorist threat level," said Maria Esperaguera, former U.S. Army Communications-Electronics Command (CECOM) deputy to the commanding general. Tobyhanna continues to make advancements in all aspects of its overall protection program. The depot was recently recognized by the assistant secretary of defense for its rigorous and aggressive national preparedness campaigns. Tobyhanna also received a "commendable" rating in AT, emergency management and continuity of operations planning programs by the CECOM commanding general.



(U.S. Army photos)

AMCOM 101: BUILDING RELATIONSHIPS THROUGH EDUCATION

By Kari Hawkins, AMCOM Public Affairs

There are times when the Army's support functions need to take a step into the spotlight. Such is the case at the U.S. Army Aviation and Missile Command's (AMCOM) annual event, AMCOM 101.

Long associated with providing behind-the-scenes maintenance, sustainment and logistics support for the Army's aviation and missile systems, the command has hosted the event to provide information to deploying aviation unit commanders and their command leadership.

"AMCOM 101 is a tool that we use to ensure the readiness of aviation and missile system units," said Brig. Gen. Douglas Gabram, AMCOM commander.

In 2015, the program took a major leap forward when it broadened its scope to include officers and enlisted leaders from all aviation and missile units in two separate events – AMCOM 101 for Aviation and AMCOM 101 for Missiles. The two events relate directly to the top Army priority – readiness.

"To achieve readiness, we all must work together with AMCOM in a support role to Soldiers and with Soldiers knowing what resources are available to them through the AMCOM network of support," said Gabram.

For AMCOM Command Sgt. Maj. Glen Vela, the exchange of aviation and missile knowledge makes AMCOM 101 a hands-down winner with Soldiers.

"Soldiers in the field are hungry for knowledge. They want to know more about the 'apps in the background,' the support

that's available to them. The knowledge they gain from AMCOM 101 helps immensely with their mission," Vela said.

For many commanders, officers and enlisted Soldiers assigned to AMCOM during their career, it can be surprising to learn the vast impact the organization has on Soldiers in the field.

"When Maj. Gen. (Jim) Richardson got here (in 2014), he didn't realize all that AMCOM does, even though he had been an aviator during six deployments before he came here," said Pete Alampi, an analyst with the Readiness Directorate, AMCOM Logistics Center, who coordinated the 2015 events. "Soldiers can feel sometimes like they are out there all alone with issues, not understanding what is back here ready to help them."

The AMCOM mission – to provide responsive aviation and missile support to the warfighter – is successful when Soldiers are aware of AMCOM capabilities.

"The warfighter has to understand what AMCOM does and how AMCOM can help them," Richardson said. "With budgets going down, we have to come together and build relationships that show us and teach us how to do things cheaper and faster. AMCOM 101 helps us be more responsive in enabling readiness."

Basically, Richardson took a low-key program focused on deploying brigade commanders and grew it into a program meant to help all aviators, aviation maintainers and air defenders in their everyday jobs.

Chief Warrant Officer 3 Shawn Bryan, an Apache maintenance examiner with the 12th Cavalry in Germany, talks to Versal Spalding, a contractor with the Program Executive Office for Aviation, about the T700 engine on display at AMCOM 101 for Aviation. (U.S. Army photo by Kari Hawkins)



Soldiers from across Army aviation join with Aviation and Missile Command employees to learn about sustainment programs at AMCOM 101 for Aviation. (U.S. Army photo by Traci Boutwell)



"When the war started after 9/11, AMCOM Commander Maj. Gen. Jim Pillsbury signed a directive that started AMCOM 101," said Dan Worsley of the Field Support Branch, Readiness Directorate, AMCOM Logistics Center. "He wanted to give deploying commanders a feel of what AMCOM would do for them before they deployed, during the deployment and once they returned. He wanted to initiate face time with these commanders in person that would continue throughout their deployments via video teleconferencing. He wanted them to be aware of all the different groups within AMCOM that they could reach back to for capabilities."

The one-day aviation-only events for deploying commanders and their staffs continued throughout Pillsbury's command and the later commands of Maj. Gen. Jim Myles, Maj. Gen. Jim Rogers and Maj. Gen. Lynn Collyar.

"AMCOM 101 generally consisted of a deploying unit's commander, warrant officer and sergeant major, and it was aviation-focused only," Alampi said. "We provided

them with briefings from AMCOM and its subordinate elements and partners, and we toured them to some of those partners here at Redstone."

Through the years of war, when three aviation brigades were deploying at any given time, plenty of new commanders needed to learn about AMCOM capabilities, Worsley said.

In 2014, with Richardson leading AMCOM and the number of deploying units decreasing, the event took on a new role – to serve as an information forum for all Army aviators and aviation maintenance Soldiers, regardless of their rank or deployment status.

"Even when rotations scaled down, there was still a need for information because the mission continues here at the home stations," Worsley said. "At home, Soldiers are still doing support missions whether they are going overseas or not, and they need to know what AMCOM can do to support them."

The first “expanded” AMCOM 101 for Aviation took place in December 2014 with more than 80 Soldiers.

“It turned out to be a great event with information that these units really wanted,” Alampi said. “It was obvious very quickly that we needed to do this on a bigger scale.”

AMCOM 101 also expanded to include an event for air defenders maintaining the Army’s missile systems. In March 2015, AMCOM hosted the event for Patriot missile air defenders, bringing about 70 Soldiers to AMCOM headquarters.

“We had never brought in missile Soldiers before, but Maj. Gen. Richardson was adamant that we needed to bring them into the fold. They are part of our team, too, and he felt very strongly about including them,” Alampi said.

With the success of that effort, AMCOM had the road map for the next two significant events – hosting more than 300 aviators and aviation maintainers at the three-day AMCOM 101 for Aviation in August 2015 and hosting more than 100 air defenders at the two-day AMCOM 101 for Missiles in October 2015. In addition, the agenda was expanded to include presentations and tours from various elements of the AMCOM and U.S. Army Materiel Command team.

“We wanted the whole Army enterprise to be involved in AMCOM 101. We wanted them to address ‘What does your organization do for Soldiers in the field? What support do you provide?’ We asked them to give examples of what they do for Soldiers and how their organization affects Soldiers, how they solve issues for Soldiers,” Worsley said.

Soldiers particularly benefited from break-out sessions that allowed them to speak directly with program managers and Logistics Assistance Representatives, Worsley said.

Another popular aspect of the events has been networking opportunities among Soldiers from different units.

“They may hear issues that one Combat Aviation Brigade is having and they can relate to that. They can share solutions, and that makes us all better,” Alampi said.

AMCOM 101 is about “relationships and about building synergy,” Richardson said. “When they are together for two or three days, Soldiers are able to share their best practices and their stories of lessons learned.”

The feedback from Soldiers validated the need to continue hosting AMCOM 101.

“This is a learning experience that has permitted me to fill in the blanks,” Sgt. 1st Class Andy Shelton said while attending AMCOM 101 for Aviation. “I have a greater depth of knowledge now about the resources available at AMCOM. Although I have 19 years of service, I now have a renewed pride of ownership when I go back to Fort Drum, New York, and continue working on equipment in my role as a production control noncommissioned officer.”

AMCOM will continue hosting the event in 2016, with AMCOM 101 for Aviation set for late summer.

“No other major command hosts an event like this,” said Gabram. “AMCOM 101 raises the bar in terms of providing our Soldiers with the best and most up-to-date information on our aviation and missile systems. But, most importantly, it shows Soldiers who they can come to when there is a problem in the field; it shows them who will provide the quick solutions they need so they can remain at peak readiness.”

With new leadership assignments, Soldiers coming and going with units and military occupational specialties, and new challenges facing aviators, aviation maintainers and air defenders, AMCOM 101 will always have an audience.

“I am looking forward to seeing for myself how this program is a value-added resource for our Soldiers,” said Gabram. ▽

The U.S. Army Aviation and Missile Command (AMCOM), a subordinate of the U.S. Army Materiel Command, develops, acquires, fields and sustains aviation, missile and unmanned vehicle systems. As a life cycle management command, AMCOM assures aviation and missile readiness with seamless transition to combat operations.



LEFT: Soldiers perform maintenance on an AH-64D Apache helicopter before conducting a mission during an exercise. (U.S. Army photo)
RIGHT: The Aviation and Missile Command’s Composite Lab uses several different tools to cut, shape and repair composite materials, including the air-powered rotor shown to aviation Soldiers by the lab’s Greg Mellema. The air-powered rotor is used to remove the damage on composite parts. (U.S. Army photo by Traci Boutwell)



INGENUITY IN ACTION: ORGANIC INDUSTRIAL BASE IN LIFE CYCLE SUSTAINMENT

By TACOM Public Affairs

ABOVE: A row of MRAP All-Terrain Vehicles sit inside the new Maneuver Systems Sustainment Center at Red River Army Depot in Texas. The depot is designated as the Center of Industrial and Technical Excellence for tactical wheeled vehicles. (U.S. Army photo by Sgt. 1st Class Michael Zuk)

RIGHT: An M284 155 mm howitzer tube is forged after it was heated in an Electric Alloy furnace. The tube was heated to nearly 2,000 degrees before the rotary forge pounded it into the near shape of a howitzer tube. (U.S. Army photo)



The U.S. Army Tank-automotive and Armaments Command (TACOM), headquartered in Warren, Michigan, spearheads life cycle sustainment for about 65 percent of the equipment an Army Brigade Combat Team uses. A global enterprise whose 19,000 professionals research, develop, procure, field, maintain, repair, upgrade, modernize and sustain the force, TACOM is formidable when it comes to enabling readiness through its depots and arsenals.

Under the U.S. Army Materiel Command (AMC), TACOM manages five facilities: Anniston Army Depot (ANAD) in Alabama; Rock Island Arsenal Joint Manufacturing and Technology Center (RIA-JMTC) in Illinois; Watervliet Arsenal (WVA) in New York; Red River Army Depot (RRAD) in Texas; and Sierra Army Depot (SIAD) in California.

These facilities join 18 other depots, arsenals and ammunition plants comprising the Army’s Organic Industrial Base (OIB), managed by AMC.

“The Army’s OIB is a national security asset, providing a critical capability in delivering readiness,

not only to the Army, but to the entire joint force,” said Gen. Dennis Via, AMC commander. “The OIB builds readiness for our Soldiers and Brigade Combat Teams, provides critical surge capabilities in support of global contingencies, and ultimately ensures our warfighters have the best equipment possible.”

Whether it is a mission of reset, Battle Damage Assessment and Repair (BDAR), manufacturing, refurbishment, retrograde, redistribution, storage or shipping, TACOM's depots and arsenals optimize the life cycle for tens of thousands of items, ranging from repair parts to major end-items like howitzers and combat and tactical vehicles.

RESET

In Fiscal Year 2015, TACOM arsenals and depots reset more than 21,000 Class VII major end-items, according to the TACOM Integrated Logistics Support Center's Industrial Base Operations Directorate. That equates to almost 58 per day.

RRAD and the Army Program Office for Mine Resistant Ambush Protected Vehicles (MRAP) just marked one year of production on the reset of the MaxxPro variant – from planning to the prototype stage, through low-rate initial and full production. The team addresses issues at the lowest level, focusing on Lean Six Sigma manufacturing tools and processes to identify waste, variability and choke points.

RRAD optimizes material reclamation by identifying pieces by part number, quantity per station where it is removed from the vehicle, and the station where it will later be reassembled onto a MaxxPro. This stabilizes the process and reduces overall reset costs.

BATTLE DAMAGE ASSESSMENT AND REPAIR (BDAR)

ANAD moved the last BDAR Stryker off its assembly line earlier this year. Central to the repairs, the weld team remained aware of the technical and structural engineering changes as the program migrated from older flat-bottom Strykers to newer double-v hull versions.

From the outset, the program encompassed more than battle-damaged vehicles; it included testing assets and vehicles involved in accidents. Once ANAD industrial artisans made repairs and upgraded vehicles to specification, they conducted appropriate inspections.

"Each team's quality goal was to present their vehicle to the Defense Contract Management Agency with zero defects," said David Funderburg, chief of Anniston's Stryker Division. "The ANAD BDAR team's ultimate goal was to support the warfighter and provide the best quality Stryker vehicle."



A metallurgist at the Rock Island Arsenal in Illinois pours liquid metal into a pattern that will be used for a M119 howitzer produced there. (U.S. Army Photo)

PUBLIC-PRIVATE PARTNERSHIPS (P3)

WVA, the nation's oldest, continuously active arsenal, has cut production costs for two artillery systems through a P3 with a company called Electralloy. The partnership, which began in 2013, has been so successful that a new 20-year agreement was signed last year.

P3s optimize partnerships to bolster and preserve OIB facilities, skill sets and processes, especially in a time of declining demand and resources, while providing industry access to those capabilities.

Electralloy uses the arsenal's workforce and its rotary forge to produce high-temperature alloys for a range of robust end uses. The company has invested millions on the arsenal, installing three new furnaces and modernizing other forge-area operations. The Army recently approved Electralloy's furnaces for use in cannon production for the 155 mm self-propelled and towed howitzer systems.

"We believe we will be able to decrease our forge time by nearly 25 percent, while using low-cost natural gas to heat the furnaces, both of which will significantly reduce the production costs for those two weapon systems," said Joseph Turcotte, WVA's deputy commander.

The partnership has exceeded expectations, expanding capacity by about 70 percent in two years, said Electralloy

President Tracy Rudolph. Work generated as a result of the P3 has enabled the arsenal to hire 25 full-time employees.

STORAGE, RECLAMATION AND REDISTRIBUTION

SIAD bolsters readiness through equipment reclamation and redistribution, asset management, storage, maintenance, assembly and containerization, and rapid worldwide materiel shipment.

The depot is home to the Army's largest processing center dedicated to the reclamation and redistribution of critical assets from installations across the world. The depot provides for the receipt, identification, condition code classification, storage, Care of Supplies in Storage, security, accountability, disposal and shipment of excess items to meet readiness demands.

Last year, in response to a presidential order involving excess U.S. equipment and training to assist the government of Iraq, SIAD was directed to repair and ship 50 fully operational MRAP Self-Protection Adaptive Roller Kits (SPARK) to the Iraqi General Depot at Camp Taji, Iraq.

SIAD stored hundreds of excess SPARK mine rollers as a result of the Afghanistan draw down. None of the rollers were operational, which prompted depot craftsmen to harvest serviceable parts from them. Sierra's skilled mechanics successfully rebuilt and tested all 50 kits prior to shipment. The entire initiative was completed in a mere three weeks.

UNIQUE CAPABILITIES

RIA-JMTC is the DOD's only multipurpose, vertically integrated metal manufacturer. It boasts more than three million square feet of manufacturing, warehousing and logistical operations space. Its model of vertical integration is not replicated anywhere within industry or government.

"We don't compete with private industry. We maintain a capability that enables private industry to do what they do until they can ramp up to meet national priorities," said Col. Don Wols, RIA-JMTC commander.

Critical capabilities are managed under one roof, enabling quick response. For example,

when a vulnerability gap in the Caiman MRAP surfaced during Operation Enduring Freedom, RIA-JMTC redesigned the armor kit and produced 504 kits within 30 days.

Consolidated operations also yield cost savings. The M997A3 Ambulance is specifically suited to meet Army Reserve and Army National Guard homeland security missions, and assist in disaster relief efforts. It is the most modern ambulance in the fleet. When the initial order of 500 ambulances was complete, RIA-JMTC was able to reduce the cost of the system by 15 percent. As a result, it received a follow-on contract for 600 additional ambulances.

Additionally, JMTC has delivered readiness for the U.S. Marine Corps by solving an obsolescence issue beleaguering the Assault Amphibious Vehicle (AAV). Originally fielded in the 1970s, the AAV fleet required impeller spares. RIA-JMTC reverse-engineered an old impeller to create a design, improved upon and produced it, helping get the AAV fleet back underway with a reliable, responsive source for impeller spares.

ENSURING READINESS

Army Chief of Staff Gen. Mark Milley has repeatedly stressed that readiness is the Army's top priority. The Army must generate readiness needed to meet national strategy and resultant requirements.

TACOM's contributions to life cycle sustainment through its OIB provide increased rapid response capabilities, more efficient and effective operations, cost savings and expanded capacity. Spanning the extent of OIB operations, TACOM's depots and arsenals contribute significantly to warfighting readiness, and the might of the nation's Armed Forces and its partners, by optimizing the life cycle for countless items. ▼

TACOM depot and arsenal public affairs offices contributed to this article.



Reclaimed add-on-armor removed from Humvees at Red River Army Depot in Texas is sent to Sierra Army Depot in California to be reset, packed and stored to meet readiness demands, ultimately saving taxpayer dollars. (U.S. Army photo)

U.S. Army Tank-automotive and Armaments Command (TACOM), a subordinate organization of U.S. Army Materiel Command, provides and sustains mobility, lethality and survivability for Soldiers, other services and allies through ground combat, automotive, marine and armaments technologies. Headquartered in Warren, Michigan, TACOM supports more than 2,000 fielded systems and more than 34,000 components that make those systems work.

ARSENAL OF THE BRAVE:

COMMITTED TO SERVING OUR COUNTRY WITH PRIDE

THOUSANDS OF AMC SOLDIERS, CIVILIANS AND CONTRACTORS WORK EVERY DAY PROVIDING OPTIMAL SUPPORT TO THE JOINT WARFIGHTER WITH SKILL, PASSION AND DEDICATION. THEY ARE THE BACKBONE OF THE ORGANIZATION, ENSURING MISSION SUCCESS. ARSENAL OF THE BRAVE PROFILES A FEW OF THE MANY OUTSTANDING INDIVIDUALS FROM ACROSS AMC WHO EXHIBIT THESE VALUES.



U.S. ARMY CONTRACTING COMMAND (ACC)

Ricardo Colón is a contracting officer at the 409th Contracting Support Brigade's 928th Contracting Battalion Regional Contracting Office in Grafenwoehr, Germany. Colón leads a team in the supplies and services division and is the contracting officer for nine contract specialists assigned to the branch. A recently retired Army major, Colón said that he sees himself as an enabler for his customers. *"We are another tool in the logistics toolbox, that when employed deliberately, provides long-term solutions that enable military and civilian leaders to shift organic resources to other areas in their battle area of operations,"* he said.



Lt. Col. David Hylton, chief of the ACC Public Affairs team, earned an honorable mention for his commentary, "Commanders and Communication," in the 2015 U.S. Army Maj. Gen. Keith L. Ware Public Affairs Awards competition. *"It was an honor to be nominated,"* Hylton said. *"My commentary was the result of my previous assignment as an observer/trainer on the Communication Strategy Team at the Joint Staff J-7. To receive the honorable mention at the Army level recognizes all of the team members."* Hylton earned the right to compete at the Army level by winning in the U.S. Army Materiel Command David G. Harris Public Affairs competition.



U.S. ARMY AVIATION AND MISSILE COMMAND (AMCOM)

Fred Allen, AMCOM's chief counsel, was selected as the winner in the Management/Executive category in the 2016 Redstone-Huntsville Chapter of the Association of the U.S. Army's Department of the Army Civilian of the Year awards. Allen manages the largest consolidated legal office on Redstone Arsenal, leading a team of 45 lawyers who have performed legal reviews of more than 5,000 contracts in support of AMCOM's diverse and global aviation and missile enterprise. His legal section provided support for more than \$21 billion of annual acquisition contracts and ensured that more than 92 percent of AMCOM's contracts were awarded without meritorious protests.



W. Daniel Featherston, program manager of the Prototype and Integration Facility (PIF) at Redstone Arsenal, Alabama, is the 2016 Department of the Army Civilian of the Year for the Redstone-Huntsville Chapter of the Association of the U.S. Army. Featherston was named the winner in the Technical/Technical Management category before going on to win the top civilian award during a ceremony in April. As the PIF program manager, Featherston manages a government and industry team of more than 1,000 employees executing more than 200 active projects estimated at \$500 million annually.



U.S. ARMY SUSTAINMENT COMMAND (ASC)

Venita King, a complaints processing manager in the Equal Opportunity Office (EEO), has 37 years of federal service, with 29 years dedicated to ASC's headquarters EEO office at Rock Island Arsenal, Illinois. King ensures that the EEO maintains a neutral position while processing complaints in compliance with regulations, and she welcomes dialogue and feedback. *"Having an open door policy allows employees to address their concerns and issues and return to work to support our Soldiers,"* she said. King said she believes assisting employees and managers with their issues is one of the most rewarding aspects of her job. In 2007, King was given the Senior Civilian Service Award for accompanying the commanding general during visits to Kuwait and Qatar.



"OUR ARMY COULD NOT ACCOMPLISH ITS MISSION WITHOUT THESE TREMENDOUS PATRIOTS."

- GEN. DENNIS L. VIA

Gayla Pacheco, chief of the Equal Employment Opportunity office, is a 35-year Army civilian employee at ASC Headquarters, Rock Island



Arsenal, Illinois. *"I love working at the headquarters of ASC. It is one of the best assignments I have worked in. We reach out to people all over the world,"* she said. *"It is exciting to speak with, and meet, individuals with a variety of cultural backgrounds and [who] come from different countries."* Her responsibilities include advising the commander and employees about any issues related to equal employment opportunities.

Diane Scott is the chief of the Plans and Operations Division, Logistics Readiness Center, Fort Drum (LRC-Drum), New York. She recently spent five months



as the interim director LRC-Drum, a job she said she enjoyed. *"You're responsible for everything,"* Scott said, adding she learned a lot about others' responsibilities and decision-making. *"It was challenging; a little bit more diverse."* Scott, who has worked almost 30 years as a federal employee, started out as a GS-3 supply clerk. She said LRC-Drum is kept very busy because the 10th Mountain Division (Light Infantry), a rapid-response division, is one of the most-deployed within the U.S. Army.

ARSENAL OF THE BRAVE

Paul Turner has spent more than a decade as director of operations at Army Strategic Logistics Activity Charleston at Joint Base

Charleston, South Carolina. Turner, who served with the Marine Corps for almost 30 years and retired as a lieutenant colonel, has supported U.S. military logistics around the world in Japan, Hawaii, Kuwait, South Carolina and North Carolina. Turner has received numerous awards and decorations throughout his career, including the Bronze Star, Meritorious Service Medal with two gold stars, Navy Commendation Medal with two gold stars, Navy Achievement Medal, and War on Terrorism Service Medal.

U.S. ARMY COMMUNICATIONS-ELECTRONICS COMMAND (CECOM)

Retired Lt. Gen. Emmett Paige Jr., former commanding general of the Communications Research and Development Command, one of CECOM's predecessor organizations, was inducted into the CECOM Hall of Fame in April. Paige, the Army's first African-American Signal Corps officer to achieve the rank of brigadier general, retired in 1988 after more than 40 years of military service. From 1993 to 1997, Paige acted as the Assistant Secretary of Defense for Command, Control, Communications and Intelligence.

Col. O. Wayne Boyd recently retired from active duty after almost 30 years of service. His most recent assignment was serving as the CECOM chaplain

at Aberdeen Proving Ground, Maryland. Boyd, whose background includes time as a behavioral health program manager, was honored during a ceremony in April officiated by Maj. Gen. Bruce T. Crawford, CECOM commander and Aberdeen Proving Ground senior commander.

JOINT MUNITIONS COMMAND (JMC)

Nicole Kirschmann serves as the executive assistant to the commanding general of JMC. As the principal administrative support to the

commander, she manages his operating schedule and develops his long-range events calendar and travel plans. Through collaboration with JMC leadership, she ensures that the commander's initiatives are actualized. She also handles all incoming phone calls and correspondence addressed to the commander and serves as the command's liaison to headquarters administrative staff.

Dan Saito, a retired Soldier who serves as a general engineer in the JMC Quality Directorate, assists his team lead with continuous assessments

of the small-caliber ammunition stockpile under the provisions of the Ammunition Stockpile Reliability Program. In addition to ensuring ammunition is safe and reliable for use, Saito is also responsible for analyzing small-caliber ammunition malfunctions, and works closely with Armament Research, Development and Engineering Center engineers at Picatinny Arsenal in New Jersey to ensure comprehensive testing of ammunition involved in malfunctions is properly assessed and reclassified as necessary. Saito continuously strives to provide the best service, support and ammunition to joint service members.

Kara Stetson, a plant management specialist at JMC, serves as an installation advocate for both Tooele Army Depot in Utah and Hawthorne Army

Depot in Nevada, which are two of JMC's 14 subordinate installations. Stetson represents the depot commanders while serving as a liaison at JMC headquarters, and ensures both the depot and the installation commanders' intents are understood. Stetson also ensures that certain installation health is balanced with JMC enterprise health. She brings an integrated and collaborative approach to discussions, plans and execution by providing both installation and headquarters perspectives.

Kevin Tiemeier serves as the JMC environmental team leader and program engineer in JMC's risk management division under the Safety and Risk

Management Directorate. Tiemeier oversees and provides guidance on development and documentation of JMC's installations' environmental programs as they apply to the Army's Organic Industrial Base and Single Manager for Conventional Ammunition operations. He also ensures team execution of Army, AMC and JMC environmental policies and procedures that provide effective management practices to improve industrial base compliance with federal acquisition and environmental laws.

MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND (SDDC)

Sgt. 1st Class Juan Mendoza, the logistics noncommissioned officer-in-charge for SDDC's 599th Transportation Brigade at

Wheeler Army Airfield, Wahiawa, Hawaii, is a 17-year Army veteran and serves as the brigade's master resilience trainer (MRT) in addition to his regular duties. Mendoza enjoys teaching and interacting with his colleagues as the MRT. His supervisor describes him as one of the best NCOs he has ever worked with in his 30 years of service.

Allison Duncan has served as the lead transportation documentation specialist with the 841st Transportation Battalion in

Charleston, South Carolina, since 2007. Starting as a high school intern, Duncan has 29 years of service with the Military Traffic Management Command, and Military Surface Deployment and Distribution Command in Charleston. She has led teams supporting the warfighter with ocean cargo documentation, customs clearances and vessel manifesting at 165 ports on the East Coast from northern Maine to southern Georgia. Duncan has ensured the timely movement of unit cargo for the 82nd Airborne Division, 101st Airborne Division, 3rd Infantry Division, 10th Mountain Division and countless National Guard and Reserve units.

Kevin White, an operations research analyst assigned to SDDC's Transportation Engineering Agency at Scott Air Force Base,

Illinois, was selected for a Career Program 36 (Analysis, Modeling and Simulation) professional development assignment with the Center for Army Analysis (CAA) at Fort Belvoir, Virginia. White will serve a 45-day tour in the CAA's Resource Analysis Division, working on a variety of analytic projects and studies impacting the National Capital Region.

U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND (RDECOM)

Dr. Jin-Hee Cho, a scientist at the U.S. Army Research Laboratory (ARL) in Aberdeen Proving Ground, Maryland, was one of 105 researchers

announced by President Barack Obama in February as a recipient of the Presidential Early Career Award for Scientists and Engineers. The award is the highest honor bestowed by the U.S. Government on science and engineering professionals in the early stages of their independent research careers. Cho currently works in ARL's Network Science Division to explore how trust management could affect tactical decision-making and cybersecurity in multigenre networks. "I owe a debt of many thanks to people who helped me at the right times and places," she said.

Pamela McDonald, a senior software acquisition management advisor at the U.S. Army Aviation and Missile Research, Development and

Engineering Center, recently received the 2016 Modern-Day Technology Leaders Award at the 30th Annual Black Engineer of the Year organization's Science, Technology, Engineering and Mathematics Conference in Philadelphia, Pennsylvania. The award recognizes an individual's commitment to shaping the future of engineering, science and technology. "It is an honor to be recognized as a Modern-Day Technology Leader for work that keeps our warfighters, country and allies safe," McDonald said. "I value my opportunity to provide technical expertise and provide mentorship to future engineers from all walks of life."



“WE MUST CONTINUE TO WORK HARD, FINDING THOSE INNOVATIVE SOLUTIONS, WORKING COLLABORATIVELY TO ENSURE THAT OUR DEPLOYED MEN AND WOMEN HAVE AN OVERWHELMING EDGE ON THE BATTLEFIELD AND TO ENSURE THEY ALL COME HOME.”

– GEN. DENNIS L. VIA

Brian Placzankis, the Weapons and Materials Research Directorate corrosion and surface science team lead at the U.S. Army



Research Laboratory in Maryland, was recently awarded the 2015 Ralph P.I. Adler Award for Lifetime Achievement for his work in the DOD corrosion community. Placzankis has been an active leader in the Army’s corrosion program, leading research programs and contributing his expertise to the DOD and Allied Nations Corrosion Conference. Placzankis said he is driven by his commitment to American service members. *“I will continue on with what I currently enjoy the most, transitioning better materials to make our warfighters’ missions less difficult and our weapons platforms more effective,”* he said.

U.S. ARMY SECURITY ASSISTANCE COMMAND (USASAC)

Tom Dovey, G-3 director and current interim chief of staff for the Office of the Program Manager-Saudi Arabian National Guard (OPM-SANG)



Modernization Program, oversees planning and training for the organization. Security Operations and Intelligence (G-2) also falls under G-3 operations, and in Saudi Arabia is a critical component for not only operational issues, but also the living conditions of OPM-SANG personnel at its headquarters and outlying sites. Dovey retired from active duty in 2006 and enjoys the work he is able to do for his organization. *“Working at OPM-SANG is an amazing career opportunity. This is a multi-billion dollar program that continues to grow, particularly in the aviation area,”* he said.

Thomas A. Harraghy, the chief of staff for the Saudi Arabian-based Ministry of Interior-Military Assistance Group (MOI-MAG), focuses his efforts on managing the MAG staff under the terms of a technical cooperation agreement between the U.S. and Saudi Arabian governments. Two of his ongoing mission priorities are staff synchronization with the higher headquarters, USASAC, and budget determination and execution. The former Air Defense Artillery colonel, who retired after 27 years of service, said he thoroughly enjoys serving as chief of staff in such a unique environment, and called it a “privilege to work with a partner nation on a daily basis.” MOI-MAG advises and assists the Kingdom of Saudi Arabia’s Ministry of Interior to establish and maintain forces capable of securing and protecting critical infrastructure that support shared national interests.



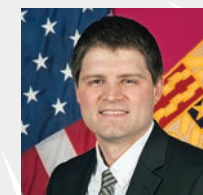
U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND (TACOM)

Mechelle Huggins has over 35 years of service and is a supervisor for the Red River Army Depot (RRAD) Technical Requirements Branch in Texas.



Working for RRAD is a family tradition for Huggins. Her grandfather, Rex McKay, is an Army veteran who served in World War II and retired as an RRAD worker. Her mother, Audrey Capps, retired as an RRAD worker and was one of the first female mechanic leadermen and inspectors. Her father, J.C. Capps, is an Army veteran who also retired as an RRAD worker. Huggins has two children currently employed at RRAD, making them fourth generation employees.

James Schwartz, a program analyst/team leader in the TACOM G-8 Resource Integration Office, was awarded the Assistant Secretary of the Army’s Civilian Resource Management in Acquisition Environment Award. This award recognizes and acknowledges the outstanding contributions of Army civilian and military financial managers. Schwartz was recognized for leading and training his standard-setting budget execution team in support of dozens of critical systems in the Project Manager Force Projection portfolio.



Dave Arnold is a TACOM Integrated Logistics Support Center Logistics Assistance Representative (LAR) at



Fort Bragg, North Carolina. He demonstrated his willingness to partner with units on the installation to acquire a training facility. He also established programs of instructions and orchestrated back-to-basics training on weapon systems to hundreds of Soldiers. Additionally, Arnold volunteered to develop, plan and execute the pilot “LAR on LAR” Small Arms Training Course, which is designed to aid and assist LARs and Soldiers to provide world-class logistics assistance.



HOME STATION TRAINING INITIATIVE FOCUSES RESOURCES, RAMPS UP READINESS

By Phil Molter, CECOM Public Affairs

As regular unit deployments wind down and the Army scales back from more than a decade of continuous conflict, solid, effective training that keeps Soldiers focused has become a key component to maintaining readiness.

Chief of Staff of the Army Gen. Mark Milley has made readiness his number one priority, and said that the Army must “prioritize and protect home station training environments through disciplined tasking governance, improved management of mandatory training and reinvigorated unit training management across all echelons of command.”

At the U.S. Army Communications-Electronics Command (CECOM), headquartered at Aberdeen Proving Ground in Maryland, the challenge of providing the tools the warfighter needs is hardly a new one. However, the way those tools find their way into the field has taken a new direction with the Home Station Training Initiative (HSTI).

The HSTI brings together readiness enablers, including CECOM partner program executive offices (PEOs), U.S. Army Research, Development and Engineering Command, U.S. Army Forces Command (FORSCOM), U.S. Army Training and Doctrine Command, and the Assistant Secretary of the Army (Acquisition, Logistics and Technology), to synchronize efforts.

CECOM Operations and Field Support (G-3), the Program Executive Office, Command, Control, Communication-Tactical (PEO C3T), and others who comprise Army team C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance), are coordinating the HSTI charge. Together, they will provide the right tools at the right time for units as they train up to rotations at the Combat Training Centers (CTC), namely the Joint Readiness Training Center at Fort Polk, Louisiana, and the National Training Center (NTC) at Fort Irwin, California.

“Home Station Training is a broad initiative by CECOM and our C4ISR partners that aims to improve the readiness of Army units and the field support personnel who support them,” said Chris Scott, CECOM G-3 command synchronization officer. “Units have had habitual issues with particular systems at their CTC rotations, which seem to reoccur regardless of unit, and based on the data we’re collecting, most of the issues could be resolved at the operator or unit maintainer level.”

HSTI aims to improve readiness, reduce the integration burden at the Brigade Combat Team level and below, increase the agility of new equipment training and fielding, reduce reliance on contracted logistical support, synchronize outputs and innovate

the use of institutional sustainment training platforms.

Units have relied on contractor expertise for their C4ISR systems for many years, often at the expense of Soldier training, Scott said. While multiple avenues for C4ISR training exist at most installations, units are not aware of many of them, and the training providers are typically not synchronized to accommodate a unit’s training requirements. Units have also had issues identifying the entry points into their embedded field support, often having to call multiple points of contact as opposed to one single entry point.

The Initial Key Personnel Training, New Equipment Training (NET) and New Equipment Fielding (NEF), and Tech Assist processes are being reviewed to increase efficiency in establishing a life cycle training program on the newly fielded systems. During NET/NEF, field support personnel and the units’ senior subject matter experts are often trained with operators/maintainers instead of maximizing their expertise by training them to a higher level earlier in the process.

Higher-level training for warrant officers, noncommissioned officers and field support personnel (Logistics Assistance Representatives/Field Service Engineers/Field Service Representatives/Division Support Elements, etc.) is a critical investment that will assist operators/maintainers during and after NET/NEF. They are often the most reliable and

accessible over-the-shoulder training assistance after NET/NEF and most able to sustain proficiency throughout the life cycle of equipment.

“We work with the Signal University and the Mission Training Complex, which are Installation Management Command sustainment organizations, to have them fill the gap after we are done with NET,” said Rich Licata, PEO C3T field support optimization chief.

Collective effort is required enterprise-wide in order to identify the training gaps, train the subject matter experts – operators and maintainers – and sustain Soldier proficiency once equipment has been fielded and Soldier transition occurs.

While the resources have previously been available, this is a new way to present them as a cohesive solution set. The use of trouble ticket analysis during units’ CTC rotations identifies trends that will assist with the training management of the unit, while continuously identifying training capability gaps. It also provides feedback to the institutions on some of the deficient skill sets across the formations.

The C4ISR team is working with FORSCOM and the 82nd Airborne Division to conduct several pilot iterations of the HSTI. Once data is correlated, analyzed and challenges are addressed, the process will be expanded to encompass other units.

The Home Station Training Initiative aims to tailor and focus training for Soldiers through efficient preparation, maximizing readiness for exercises like this one being conducted by 3rd Brigade Combat Team, 82nd Airborne Division, at the Fort Carson, Colorado, Camp Red Devil training area. (U.S. Army photo by Sgt. Terrance Payton)

“We’ll do a forum, from soup to nuts, of how this works, and then we’ll replicate the process,” said Licata.

From a process perspective, team C4ISR is evaluating all the tools used to track tech support requests.

“The C4ISR team uses a tool called Remedy Incident Reporting Module (IRM),” said Hector Rodriguez, CECOM senior command representative to the 407th Army Field Support Brigade at Fort Hood, Texas. “We adapted IRM’s use to demonstrate unit support trends and identify gaps in maintainer operator proficiency for C4ISR weapon systems. It helps us know where to focus training, what type, what level, why and how much it’s needed.”

CECOM has taken several steps to resolve these and other issues.

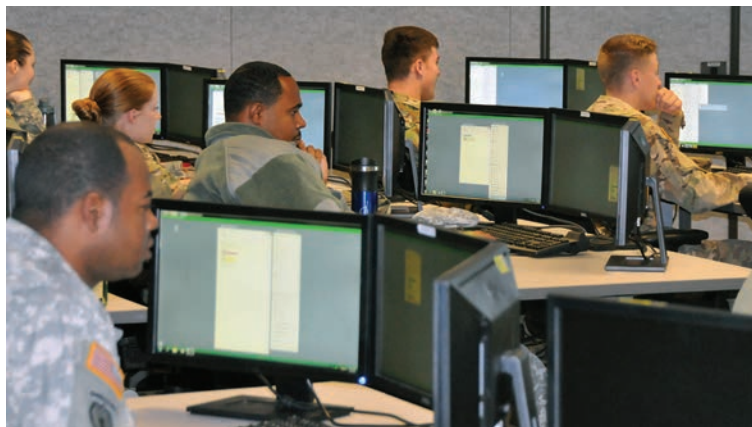
“We are working to provide feedback to a unit after their exercises on what systems see the most requests for field support assistance. We then show that unit where and how to get training for their personnel from the providers available to them,” said Scott. “We will identify ways to improve the NET/NEF process, and recommend changes to policies, processes and resourcing; develop programs with the PEOs to ensure field support personnel subject matter experts are trained prior to the unit NET; develop formalized yearly training plans for our C4ISR field support personnel; and streamline field support to create a single face to the field so that a unit knows exactly who to contact when they need field support assistance.”

This is a continuous course. The goal is to make the processes a part of the unit’s training cycle. Each senior command representative and their team incorporate HSTI into their planning. An analytical team from the CECOM Logistics and Readiness Center (LRC) collects unit CTC data for more than a year to generate reports after each rotation. These reports analyze what systems had the most trouble tickets elevated to the field support level and at what level of support it should or could have been resolved – by the operator or at a higher support tier.

Additionally, the LRC’s Training Support Division runs the Signal/Digital University programs at installations across the country and overseas, and is closely linked to forward support elements to ensure units know their capabilities to train Soldiers. A task force created during the November 2015 Joint Acquisition Sustainment Review as a combined effort between CECOM, PEO C3T, and PEO Intelligence, Electronic Warfare and Sensors, also continues to work the issue, looking at the entire NET/NEF process.

“We can’t do any of this if we’re not coordinated,” said Scott. “We will focus on efforts with specific units using pilot programs to show how HSTI can be effective. Once we’ve made some progress with units to show how they can improve, the intent is to widen the effort across the Army.”

The U.S. Army Communications-Electronics Command, a subordinate of U.S. Army Materiel Command, develops, provides, integrates and sustains the logistics and readiness of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance, or C4ISR, systems and mission command capabilities for forces worldwide.



FROM TOP: Home Station Training Initiative (HSTI) seeks to improve readiness by re-energizing through observation and collection of trouble call data from exercises like this one conducted at Fort Bragg, North Carolina. (U.S. Army photo by Staff Sgt. Jason Hull)

HSTI aims to enable program executive offices and program managers to rapidly adjust New Equipment Training and Fielding based on feedback from Soldiers like these from the 2nd Brigade Combat Team, 82nd Airborne Division. (U.S. Army photo by Staff Sgt. Jason Hull)

Soldiers with the 101st Airborne Division (Air Assault) train on mission command applications at the Fort Campbell, Kentucky, Kinnard Mission Training Complex. (U.S. Army photo)

INTEGRATED LOGISTICS STRATEGY ENSURES WARFIGHTER READINESS

By Nate Hawley, Nick Urbain and Rich Marshall, Joint Munitions Command

As the global sustainment integrator for life cycle management of ammunition, the primary mission of Joint Munitions Command (JMC) is to manage the production, storage, distribution and demilitarization of conventional ammunition for all U.S. military services. Its unique capabilities ensure the readiness of the nation’s warfighters.

To increase its ability to provide ammunition to warfighters worldwide, the command has enhanced its business model by implementing the Enterprise Integrated Logistics Strategy (E-ILS).

“The E-ILS provides JMC headquarters a framework to manage the national wholesale ammunition logistics network of installations that produce, store, distribute and demilitarize munitions for the DOD,” said Rhonda VanDeCastele, JMC executive director for ammunition.

The munitions wholesale network consists of Tooele Army Depot, Utah; McAlester Army Ammunition Plant, Oklahoma; Crane Army Ammunition Activity, Indiana; Blue Grass Army Depot, Kentucky; Letterkenny Munitions Center, Pennsylvania; Pine Bluff Arsenal, Arkansas; Anniston Munitions Center, Alabama; and Hawthorne Army Depot, Nevada. In addition, the network is integrated with both government-owned, contractor-operated producers and contractor-owned, contractor-operated producers.

The E-ILS gives an enterprise framework to guide decision-making across all missions and activities throughout the wholesale logistics base.

The critical logistics mission of the JMC network is to perform the outloading of ammunition during contingency operations for all joint services. This outloading requirement is based on a Combatant Commander’s operational plan, and is intended to be executed over a 13-week period.

The type of ammunition items and timing of the outloading requirement is governed by the



Various 40 mm rounds await inspection at the ammunition supply point at Kandahar Airfield, Afghanistan. (U.S. Army photo by Spc. Rochelle Krueger)



Workers from the Shipping and Storage Division, Depot Operations Directorate, at McAlester Army Ammunition Plant in Oklahoma, work to load 500-pound bombs in shipping containers for distribution to customers. (U.S. Army photo by Lea Giaudrone)

Munitions Deployment Planning Process. In order for the JMC network to sustain its critical outload capability, supporting functions that maintain the network's ability to perform a contingency outload exist. Recurring or peacetime outloading capability is defined as the cyclical receipt and shipping of ammunition, which supports all military services' training, test and other distribution requirements.

“THE JMC NETWORK HAS THE RESILIENCY TO THRIVE AND SURGE IN A COMPLEX WORLD TO FULFILL DOD’S AMMUNITION REQUIREMENTS...”

“These daily receipt and issue depot operations are considered a critical supporting function because they maintain a trained and ready military force and sustain a skilled, primed logistics workforce ready to carry out a contingency surge,” said VanDeCastele.

The JMC E-ILS network also provides other critical supply depot functions that must be performed to ensure serviceable ammunition is available and can be transported in a safe

and secure manner. First, ammunition inventory activities ensure that ammunition is available and the accountable record is maintained, ultimately confirming the correct quantity is on hand and at the correct storage location. The ammunition surveillance mission ensures ammunition is stored in a safe manner, is maintained in a serviceable condition and is available for issue without restriction to satisfy customer requirements. Care of Supplies in Storage is a set of processes and procedures that ensure materiel in storage is maintained in ready-for-issue condition or to prevent uneconomic deterioration of materiel. Finally, JMC also sustains the serviceability and availability of International Organization for Standardization, containers used in support of contingency outload and recurring distribution demands.

A key concept of the E-ILS framework is a distribution network that balances readiness and efficiency. Over the last four years, the JMC network, on average, has shipped and received 331,605 short tons of munitions annually. Through E-ILS, JMC has established a stateside regional distribution network of primary distribution locations that ship munitions to the joint warfighter.

“From an efficiency perspective, the regional distribution network enables the Army and joint force customers to save on transportation costs by positioning munitions supply in the region where



LEFT FROM TOP: An employee at Lake City Ammunition Plant in Missouri inspects munitions on an assembly line.

An operator at Lake City Ammunition Plant in Missouri uses hand gages to validate case acceptance dimensional data after cycling the ammunition through a case line quality verification station. (U.S. Army photos by Master Sgt. James Eagleman)



Finally, E-ILS also takes into consideration production and other third-party workload performed at JMC installations. The JMC network provides critical munitions production capabilities and support to a wide range of private and public customers. JMC utilizes E-ILS as a workload decision strategy to ensure the installations sustain core capabilities, while understanding that the revenue from production and third-party workload can also help spread overhead costs to sustain the health of the enterprise. During a contingency outload surge, the depot workforce from production and third-party workload areas, as well as other personnel performing logistics functions, can be used to supplement recurring outload distribution staff to achieve contin-

gency operations manpower requirements. This additional “flex-labor” allows each depot to increase its contingency outload capacity from a lower initial level during week one of the contingency, to a maximum surge level.

Ultimately, the E-ILS provides a framework to manage the JMC network to sustain joint service munitions requirements and to ensure it is ready to safely and rapidly surge to outload munitions for any future engagements.

“The JMC network has the resiliency to thrive and surge in a complex world to fulfill DOD’s ammunition requirements for the joint warfighter and Combatant Commanders,” VanDeCastele said.

E-ILS will continue to strategically place assets in its network to responsively meet training and operational needs. JMC’s munitions operations are unique to DOD and are both an important asset and a critical capability in providing ammunition for the joint warfighter. ♡

the demand exists,” said VanDeCastele. “From a readiness perspective, the distribution network aligns inventory positioning of war reserve munitions used in a contingency outload with inventory for military annual training shipments and distribution demand. By balancing recurring training shipments with the war reserve inventory, in the event of a major contingency, JMC has a trained workforce in place to surge and meet a 13-week munitions outload, and to establish a global munitions supply chain.”

Another important aspect of E-ILS is managing the munitions storage requirements. While critical supporting supply depot functions sustain the stockpile, JMC also analyzes the storage footprint to ensure it has the proper storage capacity to meet the DOD wholesale munitions storage requirements.

Demilitarization is a critical aspect of the storage footprint and is leveraged by JMC to remove and destroy excess munitions from the stockpile for all DOD services. In essence, each military service places excess and obsolete assets into a demilitarization account that the Army is responsible for eliminating by use of various methods and technologies. To ensure munitions readiness, the E-ILS framework looks to efficiently and economically store all munitions while working to right size excess infrastructure and munitions to ensure a viable footprint into the future.

Joint Munitions Command (JMC) operates a nationwide network of conventional ammunition manufacturing plants and storage depots, and provides on-site ammunition experts to U.S. combat units wherever they are stationed or deployed. A subordinate command of U.S. Army Materiel Command, JMC provides for customers from U.S. forces of all military services, other U.S. government agencies and allied nations.

ACROSS THE YEARS



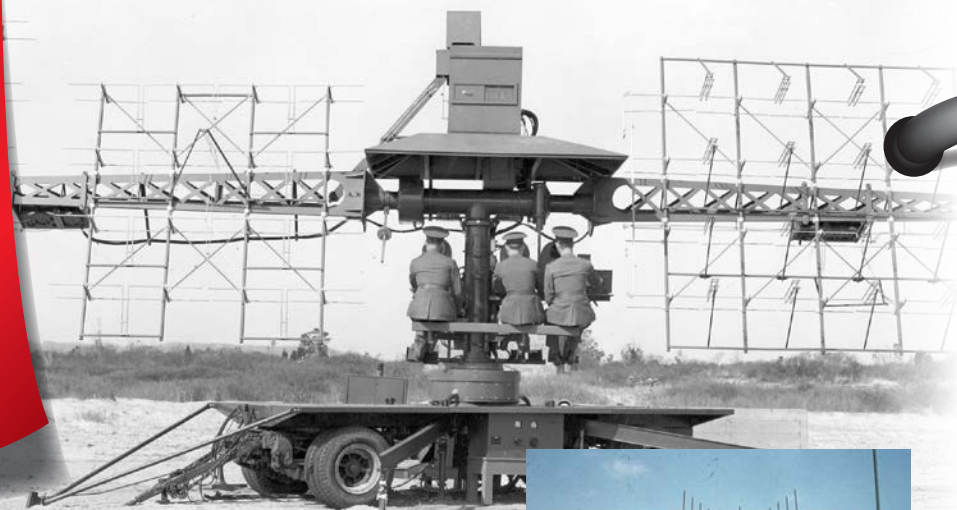
AMC'S PORTFOLIOS GROW TO MEET THE NEEDS OF THE WARFIGHTER

By Matt December, AMC Contributor

For decades, the U.S. Army Materiel Command's (AMC) Aviation and Missile, Communications and Electronics, Ground Combat Systems, and Munitions portfolios have evolved to meet the changing needs of the nation's warfighters.

Ongoing conflicts in the Middle East during the past 15 years led to the organization reassessing how it would increase readiness for the Soldier in the 21st century.

In 2004, AMC signed a Memorandum of Agreement with the Assistant Secretary of the Army for Acquisition, Logistics and Technology to formalize the Army's Life Cycle Management Initiative to provide better products to Soldiers around the globe. AMC's four Life Cycle Management Commands (LCMCs) were formed to manage each portfolio and create enhanced synergy and effectiveness among the Army's acquisition, logistics and technology communities.



TOP: Three Soldiers work the Signal Corps Radio no. 268, the U.S. Army's first radar system, in 1938.

TOP LEFT: Soldiers work in a radio shop in 1919.

TOP RIGHT: A U.S. Army Logistics Assistance Representative discusses antenna installation with a Soldier in Saudi Arabia during the 1990s. (U.S. Army photos)



ABOVE LEFT: Army experts assemble the T195 self-propelled howitzer during the 1950s.

ABOVE RIGHT: A researcher works in the Detroit Arsenal Electric Battery Test Laboratory facilities in 1962.

LEFT: A 40-foot tower is used to simulate air-to-ground signature measurements at Detroit Arsenal in Michigan during the 1970s. (U.S. Army photos)



U.S. ARMY COMMUNICATIONS-ELECTRONICS COMMAND (CECOM)



COMMUNICATIONS AND ELECTRONICS

The U.S. Army Communications-Electronics Command's (CECOM) history stretches back to the creation of the Signal Corps training facility and radio research and development laboratory in Monmouth, New Jersey, in 1917.

In the late 1920s, the Signal Corps' Electrical Laboratory in Washington and its Research Laboratory in New York merged with the Radio Laboratories at Fort Monmouth to form the consolidated Signal Corps Laboratories. Credited with the creation of radar, the labs supported the development of new communication equipment that would help win World War II.

Following the war, the Signal Corps Center was developed to consolidate many existing signal functions and capabilities. Eventually, in 1962, the Army disbanded many of the services provided by the former Signal Corps and established the Electronics Command (ECOM) at Fort Monmouth. CECOM's predecessor, which was

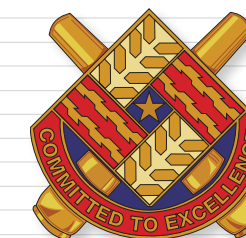
a subordinate element of the newly formed AMC, was charged with managing signal research, development and logistics support.

In 1978, ECOM was fragmented into three commands and one activity. By 1981, AMC combined two of those elements, the Communications Research and Development Command with the Communications and Electronics Materiel Readiness Command, to form CECOM.

In 2005, CECOM was designated an LCMC, formally aligning its efforts with those of its supporting partners at the Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance Program Executive Offices, Program Managers and the Communications Electronics Research, Development and Engineering Center. ♡

ACROSS THE YEARS

U.S. ARMY TANK-AUTOMOTIVE COMMAND (TACOM)



GROUND COMBAT SYSTEMS

The current configuration of the Ground Systems enterprise can trace its origins to WWII. After Chrysler Corporation constructed the Detroit Tank Arsenal in Warren, Michigan, administrative and procurement functions were managed by the newly formed Tank-Automotive Center – later renamed the Office, Chief of Ordnance, Detroit, located in the city of Detroit until 1946. After the start of the Korean War in 1950, the U.S. Army restarted operations at the Detroit Arsenal with the new Ordnance Tank-Automotive Center (OTAC), managing administration and procurement from Detroit.

In 1962, after more than a decade providing leadership in the ground vehicle enterprise, OTAC was renamed the U.S. Army Tank-Automotive Center (ATAC) and placed under the U.S. Army Mobility Command (MOCOM) – an AMC subordinate. At the same time, the Army's combat vehicle program transferred to AMC's newly formed Weapons Command (WECOM) at Rock Island, Illinois.

In 1967, AMC dissolved MOCOM and elevated ATAC to a major subordinate command with

a new name, the U.S. Army Tank-Automotive Command (TACOM). Over the next several years, TACOM took back several of the missions it had lost to WECOM, including the personnel carrier and tank missions. In 1994, TACOM gained the armaments mission and was designated Tank-Automotive and Armaments Command (TACOM).

Following Operation Desert Storm and through the mid-2000s, TACOM continued its transition as a global enterprise, while evolving its mission to meet the challenges Soldiers faced around the world. In 2003, TACOM gained the Soldier and chemical-biological missions.

By 2005, the cooperative enterprise known as TACOM LCMC brought together the command with its acquisition and research and development strategic partners to ensure unity across organizations focusing on Soldier and Ground Systems throughout the entire life cycle. ♡



U.S. ARMY AVIATION AND MISSILE LIFE CYCLE MANAGEMENT COMMAND (AMCOM)



AVIATION AND MISSILES

Redstone Arsenal in Alabama was formed in the early 1940s as part of the nation's ramp-up efforts for World War II. Redstone's facilities shifted from production to demilitarization and eventually transitioned into the center for the Army's missile and rocketry programs by the early 1950s.

For the next four decades, Redstone's scientists, engineers and technicians made vital contributions to the U.S. military by transforming and developing a variety of weapon systems. During that same period, Redstone actively supported NASA with its rocket expertise, helping to lay the foundation for U.S. space exploration.

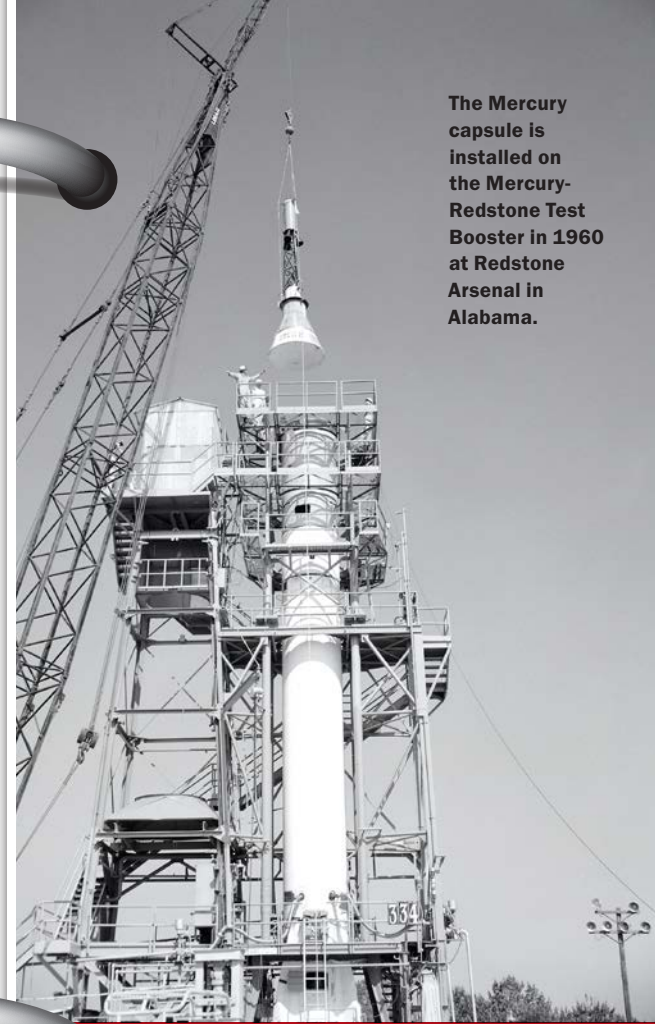
In the 1990s, the Army realigned multiple aviation and missile activities and commands to Redstone. In 1997, U.S. Army Aviation and Missile Command (AMCOM) was

established, merging the U.S. Army Aviation and Troop Command and the U.S. Army Missile Command.

In 2005, AMCOM was designated an LCMC, creating better integration with aviation and missile acquisition, logistics and technology efforts. Since the 1940s, leaders in the Army's missile and aviation efforts have combined their expertise to develop missile and weapons systems to support the Soldier in the field. ♡

TOP LEFT: Introduced into service in the 1970s, a series of shots show a Tube-launched, Optically tracked, Wire-guided (TOW) missile firing from an M151.

TOP RIGHT: In 1973, Martin Marietta Aerospace successfully fired the Army's new Surface to Air Missile-Development (SAM-D) in Florida, marking the first time the missile was launched from its own sealed canister. The missile was renamed PATRIOT in 1976. (U.S. Army photos)



The Mercury capsule is installed on the Mercury-Redstone Test Booster in 1960 at Redstone Arsenal in Alabama.



LOG CHRONICLES

HIGHLIGHTING THE CONTRIBUTIONS
OF PAST PROFESSIONALS

Retired Maj. Gen. Robert Morgan was an integral leader to the U.S. Army Communications-Electronics Command (CECOM) during its earliest days, bringing his vast experience with the Signal Corps and as an Army aviator.

Established in 1981, CECOM combined sustainment, readiness, and research and development efforts under one command for the first time.

Morgan served as CECOM's first deputy commanding general for research and development from 1981 to 1983, responsible for re-integrating the research capabilities into the newly formed command. He directed the activities of more than 2,000 scientists, engineers, professionals and support personnel. Morgan helped manage the research, development and acquisition of communications and electronics equipment and systems for three laboratories and eight project managers.

From 1984-1987, Morgan served as CECOM's third commanding general. One of his biggest contributions to the organization came after he retired from the Army in 1993 when he provided guidance that kept the CECOM headquarters located at Fort Monmouth, New Jersey, during the 1993 Base Realignment and Closure Commission, he said.

"My argument was to support the BRAC objective of getting out of a leased facility, but by moving our headquarters into the facilities vacated by the chaplain school," Morgan noted. "You have achieved the objective of saving a ton of money without breaking the command. It was a no-brainer."

- Q.** What unique capabilities do commodity commands, now known as Life Cycle Management Commands, bring to the Army?
- A.** The commodity command is like a corporation responsible for developing, producing, marketing and providing a product to consumers who become satisfied customers. The difference in what we do is that it is vitally important to meeting the needs of our customers – Soldiers in the field and units going into combat to defend our nation.

- Q.** What has been the most significant change to the way commodity commands/LCMCs conduct business?
- A.** The major change has been separating the Program Executive Offices out of the commodity commands and putting them under the acquisition executive of the Army, essentially dividing the process into parts.

- Q.** How valuable did you find it for research and development and acquisition to be aligned under the commodity commands?
- A.** We are talking about a process that involves acquiring and developing a product – that means working with U.S. Army Training and Doctrine Command and the Combatant Commanders. The essential part of life cycle management is that within each product, there has to be design for reliability, software support, testing and the functions that currently exist within the commodity command. Breaking those two aspects of the overall process is just not a coherent or efficient way of doing business.

ACROSS THE YEARS



JOINT MUNITIONS COMMAND (JMC)

MUNITIONS

The Army's munitions portfolio dates back more than 200 years when the leaders of the Continental Army organized, produced, managed and supplied the nation's first Army by constructing a federal system of depots and arsenals.

The Army's Ordnance Department was formed in 1812, and over the next 150 years, led the nation's munitions efforts, including the World War II surge, which created the current backbone of the ammunition industrial base.

During the 1960s, as the Army underwent a major reorganization, AMC consolidated the research and development (R&D), production, storage and sustainment functions leading to the creation of the U.S. Army Munitions Command (MUCOM).

In the early 1970s, MUCOM was merged with Weapons Command to form the U.S. Army Armament Command (ARMCOM), headquartered at Rock Island

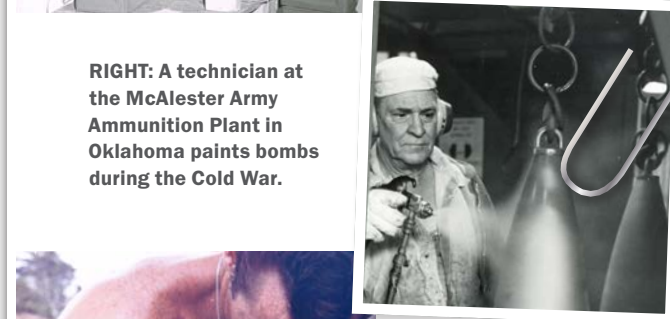
Arsenal in Illinois. ARMCOM combined the R&D, acquisition and sustainment functions for both weapons and munitions into one command. In 1976, munitions management evolved with the establishment of the Single Manager for Conventional Ammunition (SMCA). The SMCA was created to consolidate management of ammunition across DOD and create efficiencies across the Army, Air Force, Navy and Marine Corps. In subsequent organizational changes throughout the 1980s, the R&D missions were again segregated as independent commands within the munitions portfolio.

Formed in 2003 to accentuate the joint nature of the ammunition mission, Joint Munitions Command (JMC) was established. In 2006, JMC aligned with its enterprise partners, the Armament Research, Development and Engineering Center (ARDEC), and Program Executive Office Ammunition (PEO Ammo) under the new Joint Munitions and Lethality Life Cycle Management Command (JM&L LCMC). Under the LCMC, JMC is responsible for logistics and sustainment, while PEO Ammo provides acquisition expertise and ARDEC leads R&D efforts.

Today, JMC/JM&L LCMC operates an adaptive, resilient industrial base that is capable of sustaining identified critical capabilities. The command ensures that ammunition is provided to U.S. fighting forces, wherever and whenever needed. ♡



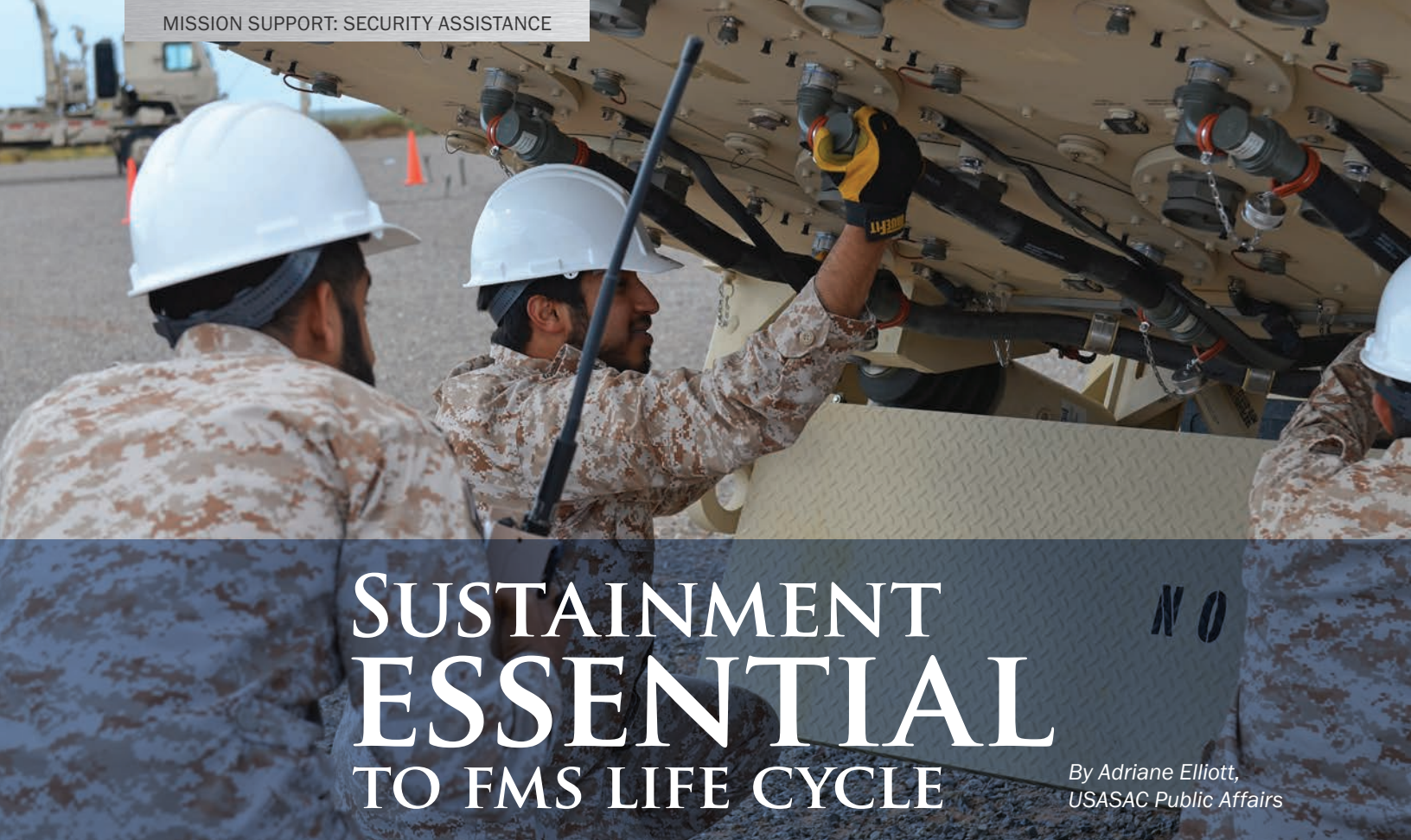
LEFT: Women package ammunition at the Lake City Ammunition Plant in Missouri during the 1940s.



RIGHT: A technician at the McAlester Army Ammunition Plant in Oklahoma paints bombs during the Cold War.



LEFT: A Soldier handles an 81 mm illuminating mortar cartridge during the Vietnam War. (U.S. Army photos)



SUSTAINMENT ESSENTIAL TO FMS LIFE CYCLE

By Adriane Elliott,
USASAC Public Affairs

United Arab Emirates airmen check cable serviceability as part of an emplacement drill during training on the Terminal High Altitude Area Defense system at White Sands Missile Range, New Mexico. The training was conducted by technical assistance field team members from the Security Assistance Training Management Organization. (U.S. Army photo by Staff Sgt. Kyle Wagoner)

From gathering requirements and negotiating contracts to acquiring, delivering and sustaining equipment, the U.S. Army Security Assistance Command's (USASAC) Foreign Military Sales (FMS) process touches every phase of life cycle management.

USASAC leads U.S. Army Materiel Command's (AMC) security assistance enterprise as the manager and executor of more than 5,000 FMS cases valued at \$168 billion. With support from AMC, Department of Defense agencies and U.S. industry, the command provides materiel, training and other services to help 153 friendly countries and multinational organizations strengthen their defensive capabilities, achieve regional stability and promote democratic values.

Managing such a large and complex enterprise from cradle to grave requires USASAC's FMS experts to pay strict attention to each step of the life cycle.

The FMS life cycle begins with the country's request for equipment and services, and ends with delivery and sustainment.

The final phase of the life cycle, sustainment, is an especially important focus as the presence – or absence – of long-term maintenance can result in a failed, or highly successful, process with serious

implications. Providing a piece of equipment that becomes inoperable due to lack of maintenance defeats the purpose of FMS. Some countries may be unable to protect their borders or contribute to regional stability with defective equipment. Another byproduct of sustainment failure is that U.S. troops may need to deploy more frequently in support of defenseless foreign nations.

Failed sustainment can also bring about unsuccessful joint operations when U.S. troops depend on partner nations that have interoperable, functioning weapon systems.

In fact, sustainment is so important that it begins long before partner nations receive materiel, according to USASAC's Leslie Davis, who has worked every facet of FMS cases for well over a decade. Davis is currently the logistics management specialist for Southern Command countries, serving as the technical authority for total package fielding of equipment, training and other services related to FMS.

"By the time we deliver equipment to a customer, we have already started delivering spare parts and other sustainment capabilities," said Davis, the former Iraq country program manager. "In the case of a piece of equipment the country has never had

before, we want to deliver two to three years' worth of sustainment parts so they build their prescribed load list – a warehouse, so to speak – which carries all the items needed for the constant upkeep of advanced weapons systems and equipment."

As spare parts trickle in ahead of the equipment, training on how to operate, repair and maintain the equipment may have taken place a year or more in advance. In accordance with the U.S. Department of State and Combatant Command priorities, partner nations not only receive equipment and spare parts, but also training, tech manuals and maintenance as part of the FMS Total Package Approach.

training teams worldwide in support of the Total Package Approach.

Not building sustainment into a case is not an option, said Davis.

"Without the support to sustain a piece of equipment, components will eventually break down, and you're dead in the water," Davis said. "When we deliver equipment to the customer, based on burn rates, operational tempo and usage, the system is obviously not going to last forever. It's no different than your car; you know it's a matter of time before you're going to have to replace the oil, the air filters and the tires to keep it working."

USASAC is responsible for the life cycle management of FMS cases, from development to execution and closure:

Country
Request/COCOM
Endorsement

Approval
of State
Department/
Congress

Case
Developed/
Offered

Country
Agrees &
Submits
Initial Deposit

USASAC
& Others
Execute

Case
Closure

"Through the Total Package Approach, when a country purchases equipment, they are purchasing a portfolio of support services," Davis said. "It's already funded as part of the case, so it's there when they need it."

In the case of antiballistic missile systems delivered last year to the United Arab Emirates (UAE), long before the system arrived in the UAE, nearly 100 of its officers and airmen spent eight months at Fort Bliss, Texas, learning detailed operation of the Terminal High Altitude Area Defense system – one of the most advanced missile defense systems in the world. Prior to the technical training, the UAE students attended a six-month English language course in San Antonio, Texas.

The U.S. Soldier-trainers were members of a technical assistance field team headquartered at the U.S. Army Security Assistance Training Management Organization (USA-SATMO), based at Fort Bragg, North Carolina. USA-SATMO is a brigade-equivalent subordinate organization of USASAC that deploys

While long-term sustainment provides evident benefits to the partner nation, the U.S. government also profits. When partner nations maintain operational readiness, the required maintenance employs thousands of U.S. citizens and keeps America's depots, arsenals and ammunition plants open for business.

"When we're talking about sustainment, we're talking about supplying everything from the tiniest nuts and bolts to the enormous tracks that go on tanks. We're talking about technical manuals and having U.S. personnel in country for support, because the reality is that troops in foreign militaries move up and on, and there are always going to be new personnel who need to be trained on the equipment," Davis said.

Davis is hesitant to call the sustainment portion of an FMS case a never-ending process, but "as long as you want that equipment to work, you're going to need the resources and expertise to make it happen." ♥

The U.S. Army Security Assistance Command (USASAC) has been providing Army materiel and services to foreign partners through security assistance and Foreign Military Sales (FMS) for 50 years. USASAC programs help Combatant Commands build eligible international partners' capacity to provide both interoperability and an independent capability in their areas of responsibility, which is vital to achieving U.S. national security objectives. A subordinate command to the U.S. Army Materiel Command, USASAC has relationships with 153 countries and more than 5,000 cases with a total program value of \$168 billion.

LCMCs PROVIDE COLLABORATIVE ENTERPRISE FOR SOLDIER SUPPORT

By Brian Beall,
AMC Chief Technology Office



FROM TOP: First Lt. Alyssa Noltner, 2nd Brigade Combat Team, 82nd Airborne Division, and Soldiers conduct a communications check en route to set up a Tactical Operations Center on White Sands Missile Range, New Mexico, during the Network Integrated Evaluation 16.1. (U.S. Army photo)

Soldiers from 2nd Brigade, 1st Armored Division, dismount from a Stryker vehicle during the Network Integration Evaluation 13.1 at Dona Ana Range, New Mexico. (U.S. Army photo by Lt. Col. Deanna Bague)

Develop, acquire, equip and sustain – the U.S. Army Materiel Command's (AMC) life cycle management commands (LCMCs) provide these four critical functions in support of the Soldier.

As the Army is called upon to be more expeditionary in response to an increasing number of missions and threats while facing decreased budgets and manpower, AMC has aligned three of its research and development centers with their respective LCMCs to integrate materiel development and enhance readiness.

Operating as a collaborative enterprise, AMC's research and development centers dedicated to aviation and missile, communications-electronics and ground combat systems provide their respective LCMCs with innovative solutions across the life cycle.

Based on Army Chief of Staff Gen. Mark Milley's top two priorities to provide readiness today and build an agile, adaptive Army of the future, AMC's LCMCs are now positioned to provide Soldiers cutting-edge materiel solutions from development through sustainment.

"You and I, as an Army, have to maintain the capability and the readiness. We have to sustain that which we have learned over 15 hard years of lessons learned," said Milley at the U.S. Army Reserve Command Senior Leader Conference in April.

As the complexity of threats and number of named missions across the globe increases, responsiveness to the needs of the Soldier remains an enduring priority.

"We must conduct self-analysis and challenge our assumptions in order to develop faster, cheaper and

more effective technologies for our Soldiers," said AMC Chief Technology Officer Patrick O'Neill.

Within the aviation and missile portfolio, U.S. Army Aviation and Missile Command's (AMCOM) synchronization with the Aviation and Missile Research, Development and Engineering Center (AMRDEC) supports the procurement and maintenance of all aviation and missile assets for Soldiers' use today, in addition to integrating the technologies of tomorrow that will improve Soldier survivability and lethality.

"We have to continue operating as a connective entity," explained AMRDEC Director James Lackey. "We are no longer working in a directorate by directorate stove pipe. Instead we are raising our heads and looking

A Black Hawk flies over a mosque in Baghdad during a routine flight. The Army is seeking to improve the fuel efficiency of its Apache and Black Hawk helicopter fleets through the Improved Turbine Engine Program. (U.S. Army photo)

around and asking, 'How can we partner with different directorates in this technical domain?' By doing this, both our process efficiencies, and more importantly, end-product effectiveness outcomes are that much increased."

AMC's three commodity-oriented LCMCs, working with their partners at the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology already procure, equip and maintain the materiel solutions of today's Soldier. The integration of their affiliated Research, Development and Engineering Centers ensure LCMC commanders have full visibility across the materiel enterprise in coordination with AMC's Chief Technology Officer and the U.S. Army Research, Development and Engineering Command. ▽

U.S. Army Materiel Command's Chief Technology Office serves as the primary representative to the Department of the Army, Secretary of Defense, the Training and Doctrine Command, academia and industry for all matters pertaining to science, technology and engineering developmental activities. Its role is to empower and encourage innovation and professional growth within the Army's materiel development enterprise, navigate thinking, and infuse industry and academia across the Army's modernization effort.

CONTRACTING SUPPORTS SUSTAINMENT

By Ed Worley, ACC Public Affairs

U.S. Army contractors assist with retrograde and descoping operations in Afghanistan at a descoping site coordinated by the 608th Engineer Detachment, Construction Management Team, 4th Resolute Support Sustainment Brigade, at Bagram Airfield, Afghanistan. Contractors support U.S. global operations with more than 30,000 in Afghanistan alone. (U.S. Army photo by Sgt. Adam A. Erlewein)

Contracting makes it possible for the U.S. Army Materiel Command (AMC) to accomplish its mission: develop and deliver global readiness solutions to sustain unified land operations, anytime, anywhere. A key component of that mission is the sustainment of the Army's equipment.

The Army Working Capital Fund (AWCF) funds the majority of depot operations and the parts repair system. In Fiscal Year 2015, U.S. Army Contracting Command (ACC) executed more than 19,000 AWCF contract actions valued at nearly \$2.5 billion.

"Contracting is the key leveraging function in systems support and supply chain operations," said James Wright, ACC's business analysis division chief.

Through its contracting centers, ACC performs the "primary acquisition function supporting program executive offices (PEOs) and program managers (PMs) in the development, acquisition and fielding of Army weapon systems. The Defense

Logistics Agency, in conjunction with ACC, provides sustainment support to those systems," Wright added.

With sustainment accounting for 70 percent of life cycle costs, the Army needs to integrate development, acquisition – or contracting – and sustainment on the very first day of a system's life cycle, according to James Dwyer, AMC's principal deputy to the deputy chief of staff for Operations and Logistics, G-3/4.

"Decisions made early on can drive the cost up or down, so we've got to ensure that those three functions are integrated every day throughout the life cycle," Dwyer said during the 2016 Association of the U.S. Army Global Force Symposium. "You cannot build sustainment into a program at Milestone C."

An integrated contracting strategy developed in conjunction with program managers, life cycle management commands (LCMCs) and the Defense Logistics Agency can greatly reduce the total cost of a weapon system throughout its life cycle, said Wright, who has more than 30 years of experience in Army budget, logistics and contracting.



ABOVE LEFT: An Army civilian contractor (second from left), instructs Afghan Border Police (ABP) officers on how to properly search a vehicle at the ABP Border Center in Spin Boldak, Afghanistan. U.S. Army Soldiers assigned to NATO Training Mission-Afghanistan partnered with civilian contractors to instruct ABP in weapons fundamentals, room clearance, establishing road check points, and conducting vehicle and foot patrols. The seven-week program is designed to strengthen training for the border police to combat insurgent activity along Afghanistan's 1,200-mile boundary with Pakistan. (U.S. Army photo by Sgt. Richard Andrade)

ABOVE RIGHT: Spc. Vonza Abney and Pfc. Hanook M. Chi, both parachute riggers with Task Force Lifeliner, observe a contracted aircraft as it lifts up a generator during sling load operations to supply forward operating bases at Bagram Airfield, Afghanistan. (U.S. Army photo by Sgt. Sinthia Rosario)



"Balancing supplier performance, supply risk, and the relationship value of suppliers at the prime and sub-contractor level must be accounted for," he said.

Each functional area across the life cycle processes, measures and evaluates risk differently, Wright noted.

"Program risk management is primarily concerned with meeting identifiable goals within the program, with a presumption that a supplier, level of production or technology capability currently exists, and that evolutionary acquisition strategies can be met," he said. "However, in some programs, technology and manufacturing requirements are not yet mature and different risk management elements must be considered."

ACC contracting centers supporting PEOs, PMs and LCMCs execute their customers' requirements, manage major maintenance contracts including reset and recapitalization, and execute performance-based logistics contracts.

The Army has used contracting to supply goods and services in every U.S. military operation since the American Revolutionary War, according to Mikhael Weitzel, ACC command historian. Robert

Morris, one of the nation's founding fathers, made contracting the official method of supplying the Continental Army. Contractors were hired as wagon drivers and suppliers of beef, clothing, weapons and basic engineering services.

Contractors were hired in 1781 to move the Continental and French armies from New York to the battle of Yorktown, Virginia. The use of more than 150 contracted steamers helped the U.S. Army defeat the Confederate Army at the Battle of Shiloh in April 1862 during the American Civil War.

Contractors continue today to support U.S. global operations, meeting acquisition and sustainment requirements for warfighters. According to the U.S. Central Command Quarterly Contractor Census Report published in January by the Office of the Assistant Secretary of Defense for Logistics and Readiness, nearly 44,000 DOD contractors supported operations in the U.S. Central Command area of responsibility in the first quarter of Fiscal Year 2016 – more than 30,000 in Afghanistan alone. Contractors are a vital part of ensuring the Army's logistics advantage on the battlefield. ♥

Headquartered at Redstone Arsenal, Alabama, the U.S. Army Contracting Command (ACC) and its subordinate organizations and contracting centers provide contracting support for the U.S. Army. As the Army's principal buying agent, ACC ensures that Soldiers have what they need to be successful, from food and clothing to bullets and bombs. ACC is a major subordinate command of U.S. Army Materiel Command.

BATTLE TECH

MATERIEL READINESS FOR TOMORROW'S WARFIGHTER

AMC experts have developed game-changing technology to provide the decisive edge to today's forces and ensure the Army's advantage well into the future. BattleTech provides a look at some of the amazing technology used in the command today.



ANNISTON HOUSES UNIQUE MILITARY CLEANING EQUIPMENT

Anniston Army Depot in Alabama, designated the DOD Center for Industrial and Technical Excellence for combat vehicles, is home to spinner hanger machines that are designed to handle the cleaning and surface preparation of hollow and odd-shaped work that cannot be adapted to a table. Such is the case with most combat vehicle hulls, turrets and parts. The equipment is loaded onto a hanger, or bail housing, and rotated during the blast cycle for multiple-angle cleaning. The hangers contain two cranes, a 25-ton main and a 15-ton auxiliary, that operate using 10 motors. Depending on the size of the equipment, it is lifted 54 feet inside the blast chamber. After the door closes, thousands of stainless steel recyclable beads strike against the equipment to generate rust and paint removal, ensuring that all exposed surfaces are systemically cleaned. Anniston Army Depot owns two spinner hangers, and since their inception in 1994, more than 90 percent of the paint and rust is removed during this process. The process saves the depot hours of work per vehicle and reduces hazards to employees who would have to use ventilated protective gear to operate abrasive blasting equipment. This is a key step in the vehicle overhaul process.

Matthew Martin applies rubber pads to a M109 Paladin in preparation for cleaning in one of Anniston Army Depot's spinner hangers. The hanger, a blast boost which cleans hulls and large parts with stainless steel shot, is large enough to hold a M1 Abrams tank suspended vertically. (U.S. Army photo)

NEW TACTICAL WHEELED VEHICLE FACILITY OPENS

The Red River Army Depot in Texas officially opened the Maneuver Systems Sustainment Center in April. The center is a \$44 million facility that covers 232,000 square feet and is equipped with the latest technology for assembly/disassembly of all tactical wheeled vehicle work. "The facility standing before you today obviously wasn't built in a day; it is a culmination of 13 years of dedication, determination and visionary planning," said Col. Brandon Grubbs, Red River commanding general. "The completion of the multiyear project gives our employees a consolidated complex to conduct body repair, surface preparation and assembly processes in one centralized location."



An MRAP sits inside the new Maneuver Systems Sustainment Center during the grand opening of the facility at Red River Army Depot, April 6. (U.S. Army photo by Freida Barron)



Pvt. Angel Musa and Pvt. Anthony Hart from Romeo Company, 262nd Quartermaster Battalion, steady a hose as it shoots water into a tank during backwash procedure training as part of the Quartermaster School's Water Treatment Specialist Course. (U.S. Army photo by T. Anthony Bell)

COATING RESEARCH LEADS TO WATER PURIFICATION DISCOVERY

While working on developing more durable coatings for military packaging, a Picatinny Arsenal scientist and her university collaborator discovered an innovative way to purify water. U.S. Army Armament Research, Development and Engineering Center materials scientist and engineer Dr. Kimberly Anne Griswold and New Jersey Institute of Technology professor Sergiu Gorun found that Fluorophthalocyanine-related compositions started to exhibit unexpected characteristics when

exposed to visible light. The material generated an excited form of oxygen – singlet oxygen – that can cleave biological membranes, kill cells and attack other organic chemical bonds. Chemically, the processes are similar to what happens in sewage treatment. "The invention has potential dual-use civilian application in many parts of the world where contaminants – organic and inorganic – impact the potability of water or the availability of water," said Griswold.

NEW LAUNCH PLATFORM SUCCESSFUL IN LIVE FIRE DEMOS

The U.S. Army successfully fired a Longbow HELLFIRE missile from its newest launch platform at White Sands Missile Range, New Mexico, in March as part of an Engineering Demonstration of the Indirect Fire Protection Capability Increment 2-Intercept. During the live fire, the Longbow HELLFIRE was successfully launched as commanded by the Engagement Operations Center using track data provided from Sentinel radar. The system features a first-of-its-kind Multi-Mission Launcher, developed by the U.S. Army Aviation and Missile Research, Development and Engineering Center. It is designed to fire a variety of different interceptor missiles, depending on the threat. The Longbow HELLFIRE missile, although originally designed as an air-to-ground tank-killing missile, has recently shown success in destroying unmanned aircraft systems targets.



A Longbow HELLFIRE missile was successfully fired from the Army's newest missile launch platform, the Indirect Fire Protection Capability Increment 2-Intercept Multi-Mission Launcher at White Sands Missile Range, New Mexico. (U.S. Army photo)

STRYKERS REALIGN, SDDC DELIVERS

By SDDC Public Affairs

Vice Chief of Staff of the Army Gen. Daniel Allyn announced the Army would reorganize 20 Brigade Combat Teams and inactivate six others as part of Fiscal Year 2016 reorganizations. One of the realignments involved the repositioning of Stryker vehicles belonging to the 2nd Stryker Brigade Combat Team based in Hawaii to 2nd Infantry Division's 4th Brigade Combat Team at Joint Base Lewis-McChord (JBLM), Washington.

The realignment of the 2nd Stryker Brigade Combat Team not only requires the movement of its 320 Stryker vehicles, but also more than 40,000 additional pieces of support equipment. This seemingly daunting task falls to the surface warriors of the Military Surface Deployment and Distribution Command (SDDC), headquartered at Scott Air Force Base, Illinois.

"While this mission is unique in nature, we routinely move military equipment throughout the globe for life cycle management and sustainability of our forces," said SDDC Chief of Operations Navy Capt. Aaron Stanley.

SDDC's 599th Transportation Brigade, strategically located in the Pacific Command area of responsibility with its headquarters at Wheeler Army Airfield, Hawaii, is the primary booking agency for the Stryker realignment and will provide oversight of the entire mission.

"SDDC's strategically located brigades enable us to operate at peak efficiency around the globe," said SDDC Commanding General Maj. Gen. Susan A. Davidson.

In sync with the program manager's desire to receive a steady flow of equipment so as to not overwhelm final destination reception, the movement process began in mid-March. The 599th expects to ship about 28 Strykers every week from the port in Honolulu to Seattle's port, with final destination at JBLM. Expected completion is in August.

"Once the Strykers have cleared maintenance at our East Range, they are turned over to Project Manager Stryker, who then offers the cargo for shipping, and the 599th books the movement with a commercial carrier," said John Fisher, chief of the 599th Transportation Brigade Pacific Sealift Management Office.

The special nature of a Stryker requires certified operators every time the vehicle is on or offloaded. Additionally, the shipper will utilize the low profile Busby chassis with Stryker-capable 40-foot flatracks as conveyance for the movement.

"The military entities are responsible for driving the Strykers onto the flatracks at Schofield Barracks and offloading the Strykers from the flatracks at JBLM. In between pickup and delivery, they are in the hands of the carrier," said Bobby Lyons, an SDDC operations supervisor.

Once picked up at Schofield Barracks, the Strykers are delivered the same day to the Honolulu port, known as the port of entry.

"Matson [a shipping contractor] comes in with their special flatrack vehicles and transports the Strykers down to the port. The number shipped at one time is driven by the amount of flatracks available," said Fisher.

The Strykers are then loaded onto vessels to be received at the Seattle port of delivery after four days spent crossing the Pacific Ocean.

SDDC's 597th Transportation Brigade, based at Joint Base Langley-Eustis, Virginia, is on the receiving end in Seattle to "catch" the 599th's "pitch." Responsible for operations in the Northern Command area of responsibility, the 597th's Pacific Northwest Detachment will oversee port offload operations at the Seattle pier.

"This 'pitch and catch' between our brigades gives SDDC the capability to ship and receive items with 100 percent oversight throughout the distribution process, substantially increasing efficiency," said Davidson.

After offload from the vessel, the Strykers will then be trucked from the port to JBLM.

The all-encompassing Stryker movement requires different modes and nodes throughout the operation. Additionally, the equipment seamlessly changes hands from military, to civilian, to contractor personnel many times during the redistribution.

In conjunction with the Stryker reorganization, some pieces of equipment will be further moved through to depots for retrofitting and upgrading, which will require additional movements, all managed and tracked by SDDC and its brigades. ▽

Loaded Stryker vehicles from the 2nd Stryker Brigade Combat Team based at Schofield Barracks, Hawaii, await the 2,700-mile journey to the Port of Seattle. Military Surface Deployment and Distribution Command is overseeing the redistribution of 320 Stryker vehicles from Hawaii to Washington. (U.S. Army photo)

The Military Surface Deployment and Distribution Command (SDDC), a subordinate organization of the U.S. Army Materiel Command and Army Service Component Command of the U.S. Transportation Command, delivers world-class, origin-to-destination distribution solutions. Whenever and wherever Soldiers, sailors, airmen, Marines and Coast Guardsmen are deployed, SDDC is involved in planning and executing the surface delivery of their equipment and supplies.



BRIGADE LOGISTICS SUPPORT TEAMS

PROVIDE CRITICAL ASSISTANCE DURING PACIFIC PATHWAYS

By Maj. Albert Lee and Maj. Eric Maia, Army Sustainment Command

Soldiers from 1-2 Stryker Brigade Combat Team and 3-25 Aviation Battalion conduct hoist operations training at Rodriguez Live Fire Complex, South Korea. The Soldiers were in Korea as part of Operation Pacific Pathways, the U.S. Army's premier method to take advantage of multiple training opportunities with several countries in support of continued regional stability and security. (U.S. Army photo by Spc. Loren Keely)

In support of the Department of Defense's shift to the Pacific, the U.S. Army is leading the way in developing and strengthening relationships with allies and partner nations in the region. The Army established annual exercises, known as Pacific Pathways, to partner directly with militaries in the Pacific and create training opportunities for Army units. These exercises give Soldiers the chance to compare procedures, learn new tactics and build personal relationships.

Elements of the 1-2 Stryker Brigade Combat Team (SBCT) from Joint Base Lewis-McChord (JBLM), Washington, and 25th Combat Aviation Brigade (CAB), from Schofield Barracks, Hawaii, named Task Force Patriots and Task Force Hammerhead respectively, spent three months this year participating in Pacific Pathways 16-1, travelling to Thailand, Korea and the Philippines. During these training events, the task forces maintained a high operating tempo, requiring significant logistical support to help troops in the field get the most out of these training opportunities.

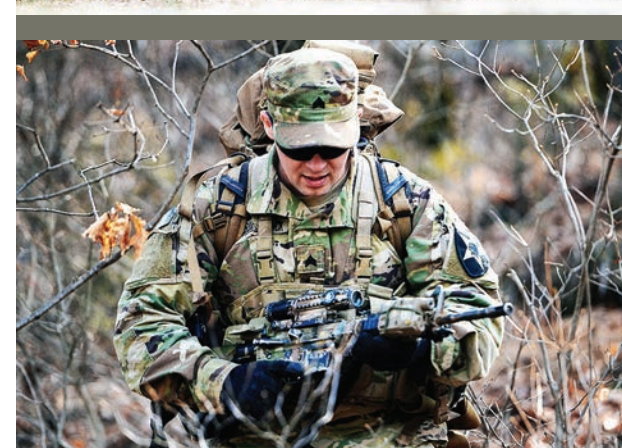
Supporting the brigades' logistical requirements were Brigade Logistics Support Teams

(BLST), managed by U.S. Army Sustainment Command (ASC) Army Field Support Brigades.

"BLST teams support commanders by providing assistance, guidance and resolution to any equipment issues that the BCT may have," said Robert Coffey, ASC chief of the Logistics Assistance Program.

The BLST consists of an Army major and a Department of the Army Civilian logistics management specialist. BLST teams coordinate support across the U.S. Army Materiel Command's (AMC) life cycle management commands – Tank-automotive and Armaments Command (TACOM), Communications-Electronics Command (CECOM) and Aviation and Missile Command (AMCOM) – as well as other logistical-enabling entities like Logistics Assistance Representatives (LARs). LARs provide subject matter expertise from a specific life cycle management command.

For Pacific Pathways, the BLSTs for both the 1-2 SBCT and 25th CAB elements served as AMC's face to the field, coordinating for long lead-time and high-cost parts, as well as making sure that the experts from TACOM, CECOM, AMCOM and other enablers were



FROM TOP: Members of 2nd Battalion, 3rd Infantry Regiment, lead Armed Forces of the Philippines counterparts to the live-fire range for a mounted and dismounted assault lane at Crow Valley Range Complex, Philippines. (U.S. Army photo by Sgt. DeJa Borden)

Soldiers from 1-2 Stryker Brigade Combat Team fire an M252 81 mm mortar during combined training at Fort Magsaysay, Philippines, in April. The Soldiers took part in Balikatan 16, an annual training exercise intended to enhance military-to-military relations and combined combat capabilities. (U.S. Army photo by Spc. Loren Keely)

Sgt. Anthony Kirkpatrick, 2nd Infantry Division, moves toward his objective during training at Rodriguez Live Fire Complex, South Korea. Korea was the second destination for the Soldiers of 1-2 Stryker Brigade Combat Team as they conducted Operation Pacific Pathways. (U.S. Army photo by Spc. Loren Keely)

matched up to solve problems quickly to get Soldiers back into the training environment. BLSTs jumped ahead of the main Task Force elements, laying the groundwork for AMC enablers to have workspaces and classrooms set up before Soldiers and their equipment arrived at each host nation. This allowed for unexpected maintenance issues to be addressed immediately when vehicles and equipment were offloaded at the ports prior to operations.

The BLSTs also coordinated and provided training on advanced and new systems, including refresher classes from CECOM LARs on the latest upgrades to Stryker communications systems and over-the-shoulder troubleshooting with TACOM and CECOM LARs for advanced maintenance issues. These training sessions allowed Soldiers to get important systems operational quickly and maintain systems in the future.

BLSTs support to Pacific Pathways also included the development, coordination and tracking of "push packages." These packages were made up of parts and maintenance items that were either not part of the authorized stockage list or too expensive to risk carrying with the unit during their travels across the Pacific. BLST chiefs custom built push packages to fit the needs of their supported units.

For example, during the Balikatan exercise in the Philippines, two BLST chiefs combined three push packages into one and coordinated an aircraft flight from Korea to the Philippines for delivery. During the Foal Eagle exercise, the 1-2 SBCT BLST team sent five separate push packages from JBLM to Korea over the eight-day exercise to keep vehicles operational to standard. The coordination between the BLST chief and Army forces logistics representative was critical to get the packages expedited through air shipping and cleared through customs as quickly as possible. By establishing relationships and processes across the enterprise, the BLSTs ensured that the necessary parts arrived in a timely manner.

The role of a BLST, especially during operations as complex as Pacific Pathways, is critical in enabling commanders to maintain a force capable of training and fighting to win the nation's wars or provide humanitarian assistance expeditiously, said Coffey. The varied support and coordination that BLSTs provide is crucial to the success of the modern Army. As the lead synchronizer of AMC assets and enablers, BLSTs are instrumental in supporting the Army's shift to the Pacific, and overall to maintain the readiness of the Army. 🇺🇸

U.S. Army Sustainment Command, a subordinate organization of U.S. Army Materiel Command, is the command and control hub for global Army logistics, supporting Combatant Commanders and the Logistics Civil Augmentation Program. The command bridges the national sustainment base to the Soldiers in the field, bringing together the capabilities of AMC to provide the right equipment, at the right place and time, and in the right condition.

INDUSTRY BRIEFINGS BUILD PARTNERSHIP THROUGH TRANSPARENCY

By Matt December, AMC Today Contributor



The U.S. Army Materiel Command (AMC) and its subordinate organizations work to promote partnership through regular planning sessions with industry at each of the command's Centers of Excellence. For more than five years, the commands have hosted regularly held sessions called Advanced Planning Briefings for Industry (APBI).

The APBI program concept was designed to inform small business and large industry partners of impending contract opportunities. Regular APBIs are hosted by AMC's subordinates around the country including: U.S. Army Communications-Electronics Command at Aberdeen Proving Ground in Maryland; U.S. Army Tank-automotive and Armaments Command at the Detroit Arsenal in Michigan; U.S. Army Sustainment Command and Joint Munitions Command at Rock Island Arsenal in Illinois; U.S. Army Aviation and Missile Command (AMCOM) at Redstone Arsenal in Alabama; Military Surface Deployment and Distribution Command at Scott Air Force Base in Illinois; and U.S. Army Armament Research, Development and Engineering Center at Picatinny Arsenal in New Jersey.

"These APBI events provide our industry partners a clear view of potential business opportunities," said Jesse Barber, AMC ombudsman and one of the original drivers behind the organization adopting the APBI concept. "We wanted to create an environment where industry – whether large or small – is informed of upcoming opportunities at the same time."

The APBI program meets requirements placed upon the Army to provide projections of all anticipated contract actions above \$100,000.

APBIs create positive relationships between the Army and its many business partners around the country, said Barber. Industry sees exceptional value in the events, leading to continued growth and evolution.

"It's excellent, not only for the Army's programs, but also for these businesses we make contact with," he said. "The APBIs have allowed us to develop relationships and opportunities that continue to help AMC focus on readiness within our development, acquisition and sustainment activities."

Working with AMC, each subordinate command has made adjustments at their particular events over the past several years to provide increased value to their industry partners, including scaling the size of the event, offering more networking opportunities and providing training with expert speakers and panels.

An organic benefit AMC and its subordinates see from the APBIs is the honest dialogue created by the networking events, said Barber.

"Our industry partners feel more comfortable coming to us about a requirement and providing additional, often vital, insight," he said. "By allowing industry to provide input before the request for proposal is issued, we can create a better requirement and reduce the amount of risk."

During one of the most recent APBIs hosted by AMCOM, AMC leadership emphasized Soldier



CLOCKWISE FROM TOP LEFT: Lt. Gen. Larry Wyche, deputy commander of the U.S. Army Materiel Command (AMC), speaks to more than 400 attendees at the Advanced Planning Briefing for Industry (APBI) hosted in March by the Aviation and Missile Command (AMCOM) at Redstone Arsenal, Alabama. (U.S. Army photo by Traci Boutwell)

Maj. Gen. Bruce T. Crawford, U.S. Army Communications-Electronics Command (CECOM) commanding general, speaks with Lisha Adams, AMC deputy to the commanding general, prior to CECOM's APBI in 2015. (U.S. Army photo)



Robbie Roberson, left, and J. Daniel Tidwell, both employees at the U.S. Army Aviation and Missile Research, Development and Engineering Center, discuss their static display at the Redstone Arsenal APBI, March 8-9. (U.S. Army photo by Traci Boutwell)



Maj. Gen. Bruce T. Crawford, CECOM commanding general and Aberdeen Proving Ground senior commander, offers his welcoming remarks to the gathered members of industry at CECOM's November 2015 APBI.



AMCOM commander Brig. Gen. Doug Gabram speaks to attendees of the Team Redstone APBI in March. (U.S. Army photo by Traci Boutwell)



Representatives from the Tank-automotive and Armaments Command staff a booth and talk with participants during a recent APBI event in Michigan. (U.S. Army photo)

readiness as its top priority. Lt. Gen. Larry Wyche, AMC deputy commander, joined Brig. Gen. Doug Gabram, AMCOM commander, to discuss future readiness with about 400 industry representatives.

"Together, our mission is to develop and deliver global readiness solutions to respond to what Soldiers need on the battlefield," said Wyche. He added that AMC continues to be globally engaged and regionally aligned to the Combatant Commands currently supporting operations

in Afghanistan, Iraq, Kosovo, Korea, Europe and other parts of the world.

"We need to transform to a more lethal, leaner and expeditionary force, and we, frankly, need your help to get there," Wyche said. "There is an opportunity right now to help reshape our great Army for the next generation of leadership. This is truly a partnership when you reflect on what we did in the last 13 or 14 years. We couldn't have done it without you." ♥

For more information on making a business connection with U.S. Army Materiel Command or one of its subordinate commands, visit www.amc.army.mil/amc/opportunities.html

“From Ground Combat Systems, Aviation and Missile, Munitions, and Communications and Electronics, focusing our sustainment efforts around four portfolios ensures our Soldiers remain the best-equipped force in the world.”

**– Gen Dennis L. Via, AMC
Commanding General**



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